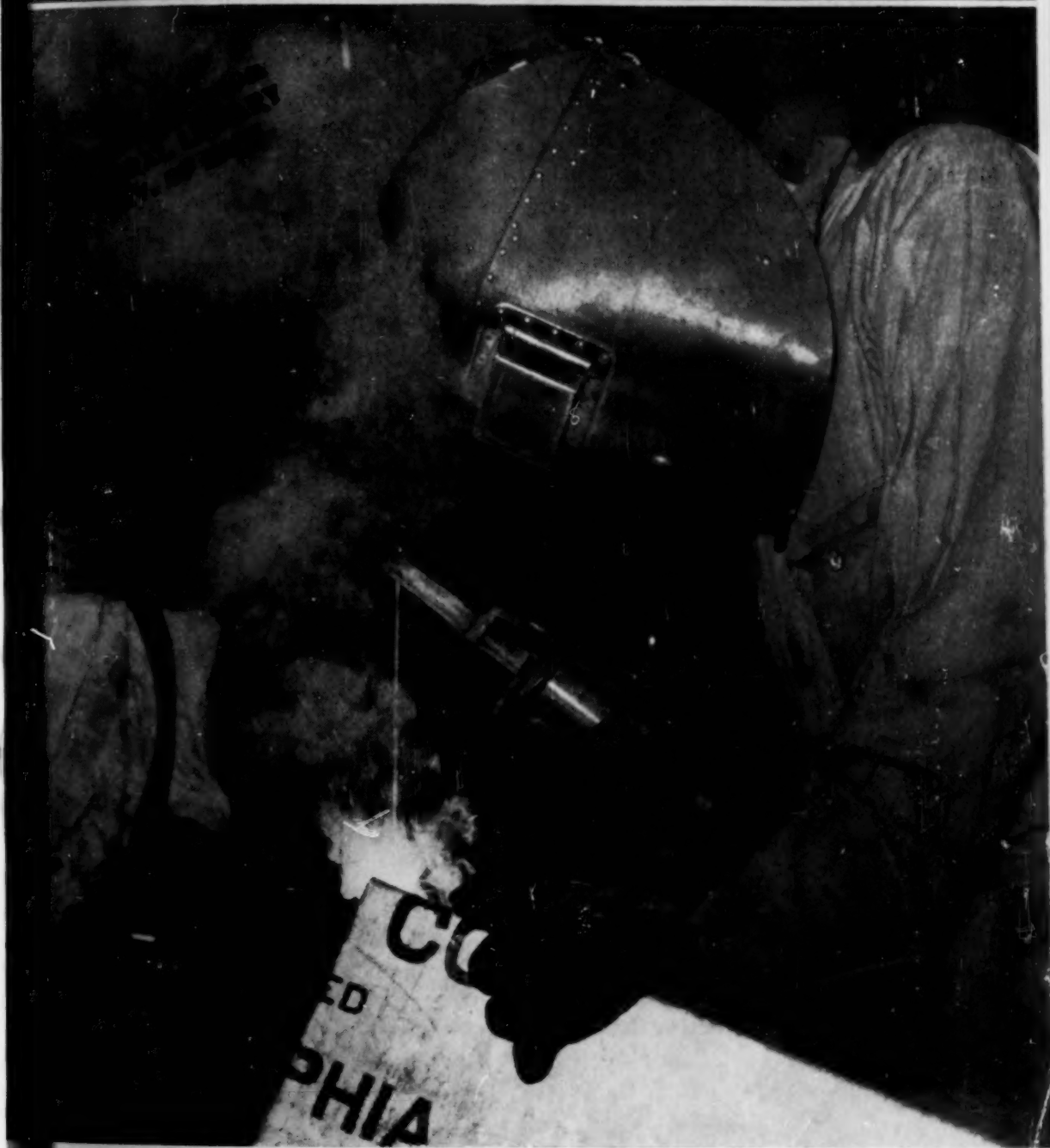


MONTHLY LABOR REVIEW

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS



Apprentice Using Electric Welder

U. S. Department of Labor Photo

this issue . . . Defense Activity and Employment . . . Industrial
Conservation, First World War . . . Increasing
Productivity in Defense . . . Entrance Rates of
Common Labor

MAY 1942
No. 1

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MONTHLY LABOR REVIEW

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

***** + HUGH S. HANNA, EDITOR + *****

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This Issue in Brief

Effect of defense program on private manufacturing employment.

The defense program is causing many profound alterations in the distribution of the industrial labor force of this country. Practically all lines of trade and industry have been stimulated, but some much more than others. Thus, of the 2,500,000 wage earners who entered private manufacturing employment between June 1940 and October 1941, 1,700,000 were placed in the durable-goods industries as compared with 800,000 in the nondurable-goods industries, and certain of the nondurable industries have been adversely affected by priorities in favor of heavy war materials. An analysis of these changes by industry, State, and city is given in an article on page 1.

Industrial conservation policies in First World War.

Various policies and practices were adopted by the United States Government during the First World War to obtain the maximum production of military goods without abandoning the essential framework of our normal industrial organization. These policies and practices were developed gradually until when the war ended a comprehensive program of industrial conservation had been fairly well shaped. Page 16.

Increasing productivity of industry under defense activities.

Under the stimulus of war needs technological improvements, such as the introduction of mass-production methods, have resulted in many economies of manufacture. Continued improvements are to be expected in war production techniques. As a result less labor will be required than previously estimated to produce a given output. In addition many of these improvements permit of the use of less skilled workers, and also permit of important savings in material. Page 34.

Common laborers' wage rates, 1941.

Hourly entrance rates of pay of adult male common laborers in 20 industries averaged 56.4 cents in July 1941, according to a study recently completed by the Bureau of Labor Statistics. The study covered 7,834 establishments in which 278,906 common laborers were reported as working at entrance rates. The average rate for the country as a whole, 56.4 cents, was 11.5 percent (5.8 cents) higher than that of 50.6 cents an hour reported in the same industries in July 1940. The average rate was 62.3 cents an hour in the North and West region as compared with an average of 38.4 cents an hour in the South and Southwest region. Among the 20 industries surveyed, the iron and steel industry paid the highest average entrance rate for common laborers (68.9 cents) and the fertilizer industry the lowest (38.4 cents). Page 149.

Job opportunities for older workers.

Under the defense program job opportunities for older workers have multiplied, as indicated by recent Work Projects Administration surveys, by the placement records of the Federal Social Security Board, by the retardation in applications for Federal old-age insurance benefits, and by the suspension of such benefits for a considerable number of old people returning to the ranks of labor. Further-

more, the age limits for various Federal Civil Service examinations have been lifted, and legislation has been passed permitting certain Government agencies to call back civil-service employees who have been retired for age. Page 59.

Residential building, first 9 months of 1941.

Construction was started on 493,000 new dwelling units in nonfarm areas during the first 9 months of 1941—an increase of 25 percent over the corresponding period of 1940. One-family dwellings accounted for this gain. The 9-month total exceeded construction in any calendar year since 1929 (except 1940) and represents 91 percent of the 540,000 units supplied in 1940. Permit valuation in the January-September 1941 period was estimated at \$1,751,000,000. Over 82,000 units—17 percent of the total—were financed with public funds. Page 225.

Earnings and hours in manufacture of cigarettes, etc.

The 38,136 factory employees reported as employed in establishments manufacturing cigarettes, chewing and smoking tobacco, and snuff, earned, on the average, 53.6 cents an hour and \$20.67 a week in December 1940, as indicated by a survey by the Bureau of Labor Statistics. The majority of these workers were employed in factories whose principal product was cigarettes; these workers numbered 25,425 and averaged 55.5 cents an hour. Comparison of the results of the 1940 survey with those of the last previous survey of the industry by the Bureau (in 1935) indicates that wages of tobacco workers rose by about 25 percent during the 5-year period. Page 184.

Union wages and hours in the baking industry in 1941.

The average hourly rate for union members in the baking industry on June 1, 1941, was 76.9 cents. About three-fourths of the union members had rates between 40 and 90 cents, almost one-third had rates between 70 and 90 cents, and approximately one-fifth had scales of \$1.00 or more. Organized workers in Hebrew bakeries received the highest hourly rate (\$1.279), on the average, while those in the pie and pastry branch had the lowest average rate (\$0.533). The 40-hour week was predominant in the industry, 69 percent of the union members having that provision. Page 174.

MONTHLY LABOR REVIEW

FOR JANUARY 1942

EFFECT OF DEFENSE PROGRAM ON PRIVATE MANUFACTURING EMPLOYMENT ¹

CREATION of the "arsenal of democracy" in America is requiring more complete use of the Nation's labor potential and is causing many profound alterations in the distribution of the industrial labor force. Nearly 5,000,000 persons have found jobs in nonagricultural pursuits since the defense program was inaugurated in June 1940, raising the total of such employment to nearly 41,000,000 in October 1941. This represents the highest nonagricultural employment on record, exceeding the 1929 peak by more than 3,000,000. Although there were still 3,900,000 unemployed workers in October 1941, according to estimates of the Work Projects Administration, labor shortages were serious in many key industries and localities. To meet these shortages women have been employed in ever-increasing numbers; the metal trades have carried forward the greatest training-within-industry program ever known in this country; and on occasion skilled labor has been "pirated," with a consequent high cost in labor turn-over.

An enormous amount of defense work remains to be completed. By October 1941 only 37 billion dollars in contracts of the 57 billion dollars' worth authorized had been placed with private industry, and only 8 billion dollars in cash had been paid on these contracts. Yet the supply of such critical raw materials as magnesium, aluminum, nickel, copper, zinc, lead, and iron and steel, was being rationed and the production of durable consumer goods seriously curtailed, resulting in widespread employment dislocations.

Defense expenditures have stimulated all lines of trade and industry, but the chief burden of producing war materiel has fallen on manufacturers normally engaged in the production of heavy durable goods (table 1 and chart 1). This is indicated by the fact that, although total factory employment increased by 2,500,000 wage earners from June 1940 to October 1941, 1,700,000 of these wage earners entered the durable-goods industries as compared to 800,000 entering the nondurable-goods industries. In October 1941 durable-goods employment reached a total of 5,500,000 wage earners, while employ-

¹ Prepared by Thomas F. Corcoran and Harrison F. Houghton, of the Bureau's Division of Employment Statistics, Lewis E. Talbert, chief.

ment in nondurable-goods manufacturing amounted to 5,100,000. This is a reversal of the relative positions of the two branches of industry, for even at the peak of the 1929 boom, when the per capita consumption of durable consumer goods was at a high level, nondurable-goods employment was greater than that in the durable-goods industries. As the defense program develops, a further expansion in durable-goods employment is to be expected. Furthermore, within the framework of the durable-goods industries the rate of conversion from production of consumer goods to that of war materiel will be accelerated. The problem of raw-material supply itself will make this conversion imperative.

TABLE 1.—*Indexes of Employment in 18 Selected Private Defense Industries, Compared with Manufacturing Employment, January 1939 through October 1941*

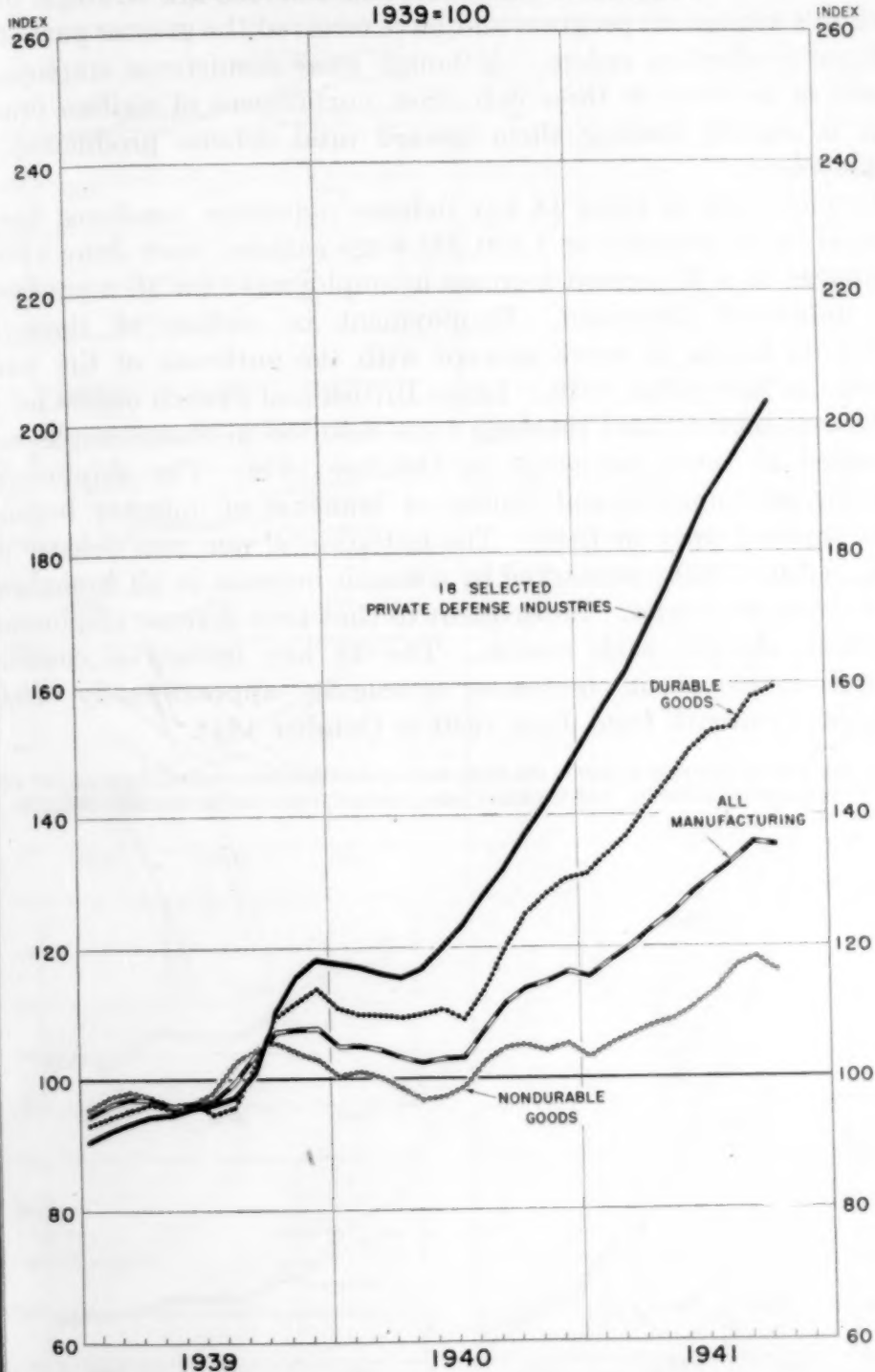
[1939=100]

Year and month	All manu- facturing	18 defense industries combined	Durable- goods industries	Nondura- ble-goods industries
<i>1939</i>				
January.....	94.6	90.7	93.2	95.6
February.....	96.2	92.3	94.5	97.5
March.....	97.1	93.5	95.5	98.3
April.....	97.0	94.5	96.4	97.4
May.....	96.0	94.8	95.6	96.2
June.....	96.5	95.7	96.5	96.5
July.....	96.7	96.1	94.8	98.2
August.....	99.6	97.3	95.9	102.5
September.....	103.8	101.1	102.4	104.9
October.....	107.4	110.2	109.5	105.7
November.....	107.6	115.6	111.8	104.2
December.....	107.9	118.1	113.9	103.1
Average.....	100.0	100.0	100.0	100.0
<i>1940</i>				
January.....	105.1	117.6	110.9	100.5
February.....	105.1	117.0	109.9	101.2
March.....	104.5	116.0	109.8	100.3
April.....	103.3	115.5	109.4	98.5
May.....	102.6	116.6	109.9	96.7
June.....	103.2	119.9	110.6	97.3
July.....	103.3	123.3	109.0	98.7
August.....	107.5	127.7	113.5	102.8
September.....	111.5	131.7	119.9	104.8
October.....	113.9	136.6	125.0	105.2
November.....	114.8	141.2	128.0	104.2
December.....	116.3	146.5	130.4	105.2
Average.....	107.6	125.8	115.5	101.3
<i>1941</i>				
January.....	115.6	151.4	131.1	103.2
February.....	117.9	156.8	134.1	105.1
March.....	120.0	161.6	137.1	106.5
April.....	122.7	168.2	141.5	107.9
May.....	125.0	174.4	145.5	108.8
June.....	128.0	181.2	149.7	110.9
July.....	130.8	188.1	152.6	113.5
August.....	133.1	193.4	153.7	117.0
September.....	135.4	198.4	157.6	117.9
October.....	¹ 135.2	¹ 202.8	¹ 159.2	¹ 116.2

¹ Preliminary.

EMPLOYMENT IN 18 SELECTED PRIVATE DEFENSE INDUSTRIES COMPARED WITH MANUFACTURING EMPLOYMENT

CHART I



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

An indication of the effect of the defense program on employment in private industry is to be had from a review of the Bureau of Labor Statistics employment indexes for 18 key defense industries (see table 2).² The industries selected are strategic in the Nation's armament program and have received the greater part of the defense production orders. Although some nondefense employment is still to be found in these industries, curtailment of civilian production is rapidly leading them toward total defense production and employment.

Employment in these 18 key defense industries combined has increased by 69 percent, or 1,100,000 wage earners, since June 1940 as compared to a 31-percent increase in employment for all manufacturing industries combined. Employment in certain of these key industries began to move upward with the outbreak of the war in Europe in September 1939. Large British and French orders for aircraft, aero engines, and machine tools resulted in sharp employment increases in these industries in October 1939. The shipbuilding, firearms, ammunition, and explosives branches of industry began to move upward early in 1940. The initiation of our own defense program in June 1940 was marked by a sizable increase in all branches of the defense industries. Subsequent to that time defense employment has risen sharply each month. The 18 key industries combined showed employment increases averaging approximately 70,000 workers per month from June 1940 to October 1941.

² Only 15 of the key industries appear in this table; employment data for explosives, firearms, and ammunition are no longer made public. The combined index, however, represents all 18 defense industries.

EMPLOYMENT IN KEY DEFENSE INDUSTRIES

1939=100

CHART 2

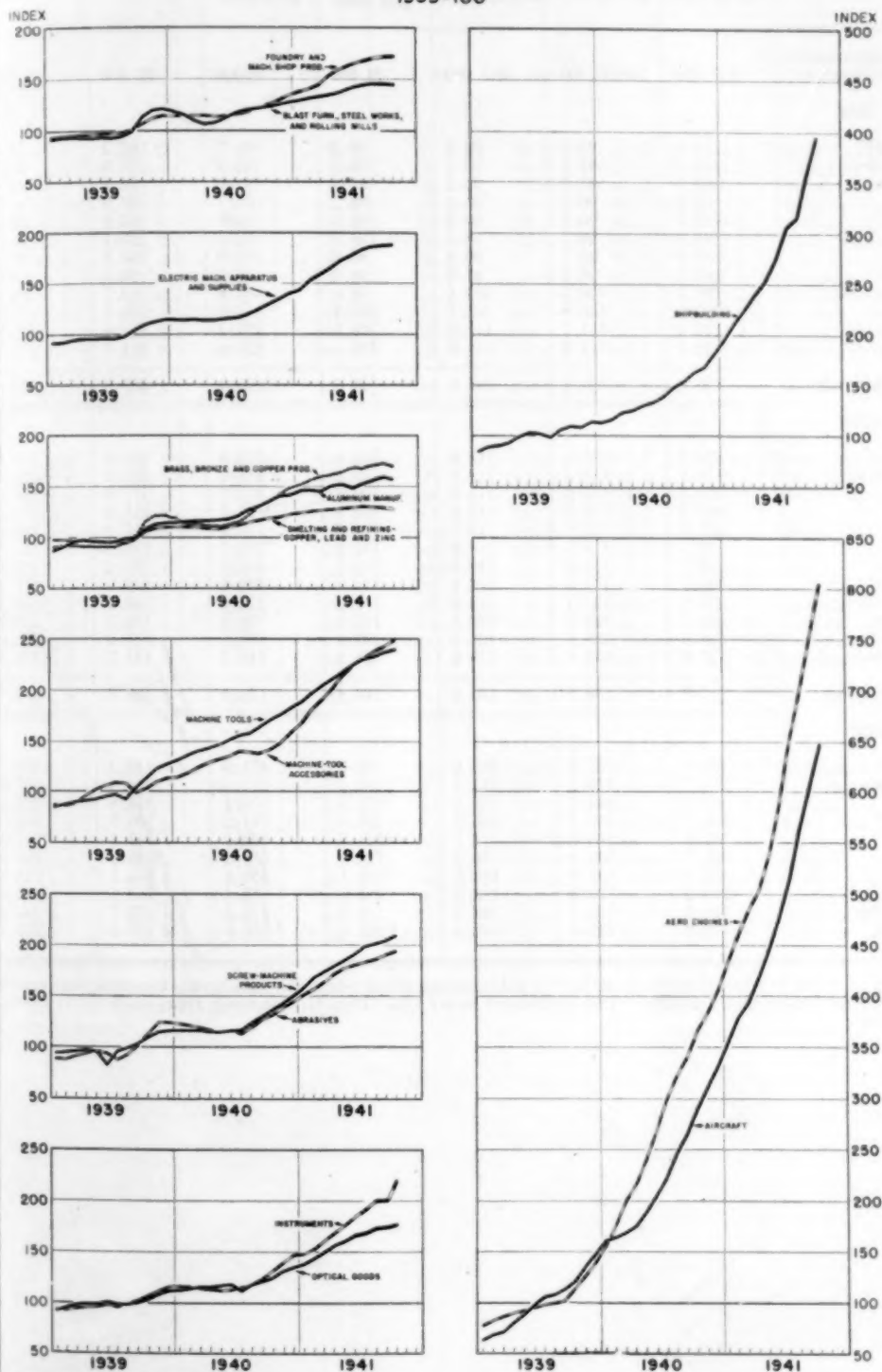


TABLE 2.—Indexes of Employment in Key Defense

[1939=100]

Year and month	Blast furnaces, steel works, and rolling mills	Foundry and machine-shop products ¹	Electrical machinery, apparatus, and supplies	Smelting and refining—Copper, lead, and zinc	Brass, bronze, and copper products	Aluminum manufactures	Machine tools ¹
1939 aggregate employment...	418,500	339,500	213,000	24,100	73,300	23,500	42,700
1939							
January.....	92.4	93.0	92.0	98.2	91.7	87.2	84.8
February.....	92.9	94.7	93.7	98.0	92.2	91.8	87.6
March.....	93.7	95.6	95.4	97.5	92.6	96.1	89.9
April.....	93.8	96.0	96.4	98.2	91.8	97.9	91.9
May.....	92.7	96.1	96.2	97.3	92.5	96.5	93.6
June.....	93.8	96.7	96.1	96.9	92.0	96.4	96.0
July.....	93.4	96.7	96.4	96.3	91.9	97.3	97.7
August.....	95.1	98.5	97.6	94.5	95.1	99.8	93.0
September.....	99.1	100.5	102.4	98.0	101.8	99.7	103.5
October.....	112.8	106.8	108.1	106.1	115.8	108.9	113.1
November.....	119.4	111.7	111.6	108.9	121.4	113.6	121.9
December.....	120.9	113.8	114.0	110.1	121.6	114.7	127.4
Average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1940							
January.....	118.5	113.8	113.0	110.1	119.9	114.9	130.4
February.....	115.1	114.3	112.9	110.2	113.3	116.0	135.7
March.....	109.3	113.8	113.0	109.8	113.7	117.0	139.8
April.....	106.3	113.8	112.8	108.8	111.1	115.9	143.3
May.....	107.0	113.0	113.2	108.3	110.9	117.1	146.5
June.....	112.1	113.5	114.8	110.4	112.3	118.4	151.8
July.....	116.7	114.8	115.3	112.7	114.5	121.2	155.6
August.....	119.7	117.7	118.4	115.8	122.1	126.9	157.4
September.....	120.8	121.1	123.6	117.0	129.5	130.4	164.3
October.....	122.7	124.9	129.0	119.8	136.8	136.3	170.9
November.....	124.8	128.9	134.0	120.1	143.5	141.3	176.2
December.....	127.0	133.6	139.8	122.4	148.5	141.7	182.9
Average.....	116.7	118.6	120.0	113.8	123.0	124.8	154.6
1941							
January.....	128.7	137.5	143.8	124.0	151.5	146.5	189.4
February.....	130.7	140.5	151.6	126.4	155.4	146.4	197.0
March.....	132.4	144.7	157.2	127.4	159.5	145.6	203.5
April.....	134.7	152.2	163.7	128.3	161.2	150.1	210.0
May.....	137.6	158.0	171.1	128.8	162.9	151.8	217.0
June.....	141.2	162.9	176.4	128.9	167.2	149.0	224.3
July.....	144.3	167.0	182.0	130.1	167.6	153.1	229.3
August.....	146.2	170.5	186.0	131.1	170.4	156.6	232.9
September.....	146.3	172.1	187.4	130.5	172.2	159.7	236.2
October.....	145.3	172.8	188.8	128.3	170.8	157.9	239.5

¹ Only 15 of the key industries appear in this table; employment data for explosives, firearms, and ammunition are no longer made public. The combined index (see table 1), however, represents all 18 defense industries.

Industries,¹ January 1939 to September 1941

[1939=100]

Machine- tool acces- sories	Abrasives	Screw- machine products	Aircraft	Aero engines	Ship- building ²	Optical goods	Instru- ments	Year and month
25,200	7,700	16,900	39,700	8,900	69,200	11,600	17,700	1939 aggregate em- ployment.
								1939
86.8	89.3	94.7	63.5	77.6	85.2	90.5	92.1	January.
86.6	88.6	95.7	68.8	82.1	89.9	94.7	93.2	February.
88.7	92.1	96.7	71.1	86.6	91.6	97.8	94.5	March.
95.5	95.0	97.0	80.3	90.0	94.7	98.8	95.2	April.
100.9	96.3	96.0	89.0	92.2	99.4	98.8	96.3	May.
105.1	94.7	83.2	97.4	95.6	102.4	100.2	97.2	June.
107.8	88.2	96.8	105.3	97.8	101.4	98.8	95.5	July.
107.4	94.3	98.5	107.3	99.0	99.0	98.5	97.4	August.
98.3	100.8	102.5	112.3	101.2	105.1	100.0	102.3	September.
102.6	113.1	109.2	120.3	112.5	108.9	103.0	107.1	October.
108.6	123.8	114.3	136.4	126.0	108.3	108.0	112.7	November.
111.8	123.9	115.5	148.3	139.5	113.6	110.8	116.5	December.
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Average
								1940
112.9	122.6	116.1	160.6	154.1	112.1	111.5	116.2	January.
117.1	120.5	115.6	162.6	177.7	116.3	113.2	115.7	February.
123.0	118.3	115.4	168.0	190.1	122.8	114.8	114.2	March.
128.7	115.9	115.5	174.7	215.9	124.5	115.1	112.9	April.
130.7	115.2	114.4	189.0	240.7	129.0	116.8	111.9	May.
134.7	115.8	115.3	205.7	268.8	132.7	118.3	113.3	June.
139.7	112.1	115.9	222.2	290.2	138.7	111.9	115.7	July.
138.4	119.1	123.0	245.6	321.6	147.6	117.4	119.0	August.
137.5	126.8	129.4	265.8	340.8	153.3	120.2	124.0	September.
141.5	131.1	135.9	290.6	366.6	160.9	124.1	132.3	October.
148.5	138.4	142.6	310.8	384.6	166.3	139.0	140.2	November.
158.2	144.6	149.6	330.7	404.9	180.2	135.3	147.5	December.
134.2	123.4	124.1	227.2	281.2	140.4	119.1	121.9	Average
								1941
167.7	150.7	156.9	355.7	434.1	195.8	138.1	147.9	January.
180.8	156.1	167.5	377.3	458.9	209.1	143.9	152.7	February.
191.2	163.4	173.3	392.8	482.0	222.0	149.8	161.0	March.
201.1	171.8	178.7	418.6	503.4	240.7	155.9	169.2	April.
211.3	177.1	184.7	445.1	538.2	252.7	160.1	175.8	May.
222.0	179.9	191.1	475.4	584.3	275.4	165.9	185.5	June.
229.0	182.9	197.9	514.0	646.1	305.9	167.8	192.2	July.
237.3	186.9	200.1	562.0	695.5	316.5	173.2	200.0	August.
242.1	190.9	203.2	605.1	753.9	358.3	174.3	200.3	September.
*248.7	*193.6	*209.5	*646.5	*804.5	394.2	*177.0	*219.6	October.

¹ Not exactly comparable with Census classification.

² Does not include U. S. Navy Yards.

³ Preliminary.

Approximately one-half of the aggregate employment gains in these key defense industries, since June 1940, is accounted for by expansion in three of the basic durable-goods industries: blast furnaces, steel works, and rolling mills; foundry and machine-shop products; and electrical machinery, apparatus, and supplies.

Blast furnaces, steel works, and rolling mills.—In October 1941, 608,000 wage earners were employed in this industry as compared to 418,500 in 1939. The steel industry represents the backbone of the defense program, yet, in spite of capacity operations, priorities have been necessary to insure war material production. A survey undertaken by Iron Age indicated that in October approximately 65 percent of the industry's facilities were engaged in defense production.³ Most of the primary contracts for heavy ordnance were awarded to steel companies and affiliates. The unprecedented shipbuilding schedule, moreover, has taxed the steel industry's capacity and forced a billion-dollar plant-expansion program to increase capacity by 10 percent. During recent months, employment in steel mills has been increasing by approximately 10,000 workers monthly.

Foundry and machine-shop products.—The foundry and machine-shops products industry includes foundries, grey-iron and malleable iron, general machine shops, and machinery not elsewhere classified. In October 1941 this industry employed 586,700 wage earners as compared to 339,500 in 1939. This sharp increase in employment reflects demands of the aircraft, shipbuilding, ordnance and machine-tool industries on this important group of subcontractors and suppliers. The huge aircraft program on the west coast required many new machine shops in that area to feed precision parts to the airframes plants. Employment in California foundries and machine shops alone in October was 65 percent, or 8,700, above the 1939 level.

Electrical machinery, apparatus, and supplies.—This branch of industry has shown a larger percentage increase in employment than either the steel industry or foundries and machine shops. In October 1941, 402,100 wage earners were employed as compared to 213,000 in 1939. The rapid expansion of industrial plant facilities, the construction of new hydro-electric power plants, army cantonments, defense housing, and new residential construction along with the electrical requirements of the shipbuilding program made heavy demands upon most segments of the industry. A recent study conducted by the Bureau of Labor Statistics, however, showed that in the electrical household appliances branch of this industrial group

³ Iron Age, November 6, 1941 (p. 91).

only 8 percent of the total man-hours worked in September 1941 were applied to items carrying "A" priority ratings. This situation is expected to change substantially in the near future as the application of raw materials priorities orders will tend to encourage diversion of production facilities from nondefense to defense orders.

Aircraft and aero engines.—This industry has not only led all other defense industries in percentage gains in employment but has shown aggregate increases comparable to those of the three basic industries mentioned above. In October 1941, 256,700 wage earners were employed in the airframe branch and 71,600 in the aero-engine division of the industry as compared to 39,700 and 8,900 respectively in 1939. No industry has ever shown such a rapid expansion of plant and personnel. Moreover, the current huge backlog of orders in the airframe branch of the industry will require (at least) an additional 200,000 wage earners by the middle of 1942. The current rate of employment increase of approximately 20,000 workers a month will be accelerated as the heavy-bomber program gets under way and as automotive companies get new plants into production. The General Motors, Chrysler, and Ford Companies with their associated supply companies will probably employ in excess of 100,000 airframe workers, as the national-defense and lease-lend programs develop. Employment in the aero-engine industry will rise sharply early in 1942 when Ford, Buick, and Studebaker begin volume production.

The plans of military authorities to locate new airframe and aero-engine plants in the interior of the country is reflected in Government awards for plant expansion. Currently, approximately 60 percent of the workers in the industry are employed in Pacific coast plants. The interior, however, with only 8 percent of the workers, has received more than one-third of all the Government assistance for plant expansion in the airframe industry. The Pacific coast, on the other hand, has received only 29 percent. Similarly Government assistance to aero-engine firms has favored plant construction away from the Atlantic seaboard.⁴

Machine tools and accessories.—The machine-tool industry has more than doubled the number of workers employed in 1939. One of the first of the industries to enter into defense production, it has shown a steady employment increase since September 1939. In September 1941, 102,300 wage earners were employed in the industry, with an additional 62,700 in machine-tool accessories, as compared to 42,700

⁴ See United States Department of Labor. Bureau of Labor Statistics. "Estimated Labor Requirements for the Aircraft Industry, June 1941."

in machine tools and 25,200 in accessories in 1939. These additions to the labor force, made at the average rate of about 2,000 per month, have been accomplished largely through the conduct of intensive labor-training programs.

Difficulty in recruiting labor with the highly specialized skills which characterize machine-tool employment has tended to limit the rate of this industry's expansion. As a result, overtime operations have been prevalent; the industry averaged more than 50 hours' work per week as early as December 1940. In September 1941, when hours for this industry reached 51.5 per week on the average, workers in some plants were working as many as 66 hours.

Shipbuilding.—Employment in private shipyards has shown percentage gains second only to aircraft. There were 272,800 wage earners employed in private shipyards in October 1941, compared to 69,200 in 1939. The largest shipbuilding program in the history of the Nation called for thousands of new workers to build naval vessels and cargo ships for the United States and Great Britain. In recent months employment in private shipyards has been increasing by more than 20,000 workers monthly as Government-financed facilities have been placed in production, notably at Baltimore, Md.; Groton, Conn.; Wilmington, N. C.; Seattle, Wash.; Portland, Oreg.; San Francisco and Los Angeles, Calif.; and several Gulf-coast locations. More than \$150,000,000 was furnished by the Government for the expansion of private shipbuilding facilities. The huge employment increase in private shipyards has been concurrent with a monthly increase of approximately 8,000 workers in United States navy yards.

The schedule of ship completion dates under the defense and lend-lease programs will require a continued increase in the number of workers in both private and Government shipyards. The private yards, which are building most of the new vessels, will require in excess of 500,000 workers by November 1942. The United States navy yards, engaged in both the construction and repair of vessels, it is estimated, will require more than 200,000 workers by that date.

Regional Changes in Factory Employment

The defense program has brought about marked changes in the employment structure of many communities in various parts of the country. Many areas have experienced substantial employment gains as a result of expansion in plants devoting their entire capacity to the filling of primary defense contracts. Gains in other areas have resulted from subcontracts for materials, supplies, and parts, while

still other localities have been affected indirectly as suppliers of basic raw materials used in defense production.

Changes in employment resulting from defense activities in the various States are indicated in the accompanying map (chart 3), which shows percentage changes in factory employment from August 1940 to August 1941. In general, the most substantial gains have occurred in those States where the greatest industrial capacity is normally concentrated—the Middle Atlantic, East North Central, and certain of the New England and South Atlantic States. The greatest individual gains among the States, however, have resulted directly from specific defense developments: In Connecticut, aero engines, shipbuilding, machine tools, firearms, and ammunition; in Kansas, aircraft; in California, aircraft and shipbuilding; in Mississippi, shipbuilding; in Maryland, aircraft and shipbuilding; and in Massachusetts, shipbuilding and machine tools. Many of the Southern States, of course, have experienced temporary construction “booms” as a result of the establishments of training camps in those areas, but these would not be directly reflected in manufacturing employment. States where the smallest gains have occurred or where actual decreases have taken place over the year include most of the Mountain States and the Dakotas.

The principal States in which the defense industries are situated are shown below, in order of importance as measured by the number of wage earners employed in August 1941:

Aircraft.—California, New York, Maryland, Washington, Kansas.

Aero engines.—Connecticut, New Jersey, Indiana.

Private shipyards.—New Jersey, California, Maryland, Massachusetts, New York, Virginia, Pennsylvania, Washington.

Machine tools.—Ohio, Massachusetts, Connecticut, Rhode Island, Illinois.

Machine-tool accessories.—Massachusetts, Michigan, Illinois, Connecticut, Ohio, Rhode Island, Pennsylvania.

Abrasives.—New York, Minnesota.

Screw-machine products.—Illinois, Ohio, Connecticut, Pennsylvania, Rhode Island, Massachusetts.

Ammunition.—Connecticut, Illinois.

Firearms.—Connecticut, New York, Michigan, Ohio, Massachusetts.

Explosives.—Indiana, Virginia, Tennessee, New Jersey, Pennsylvania.

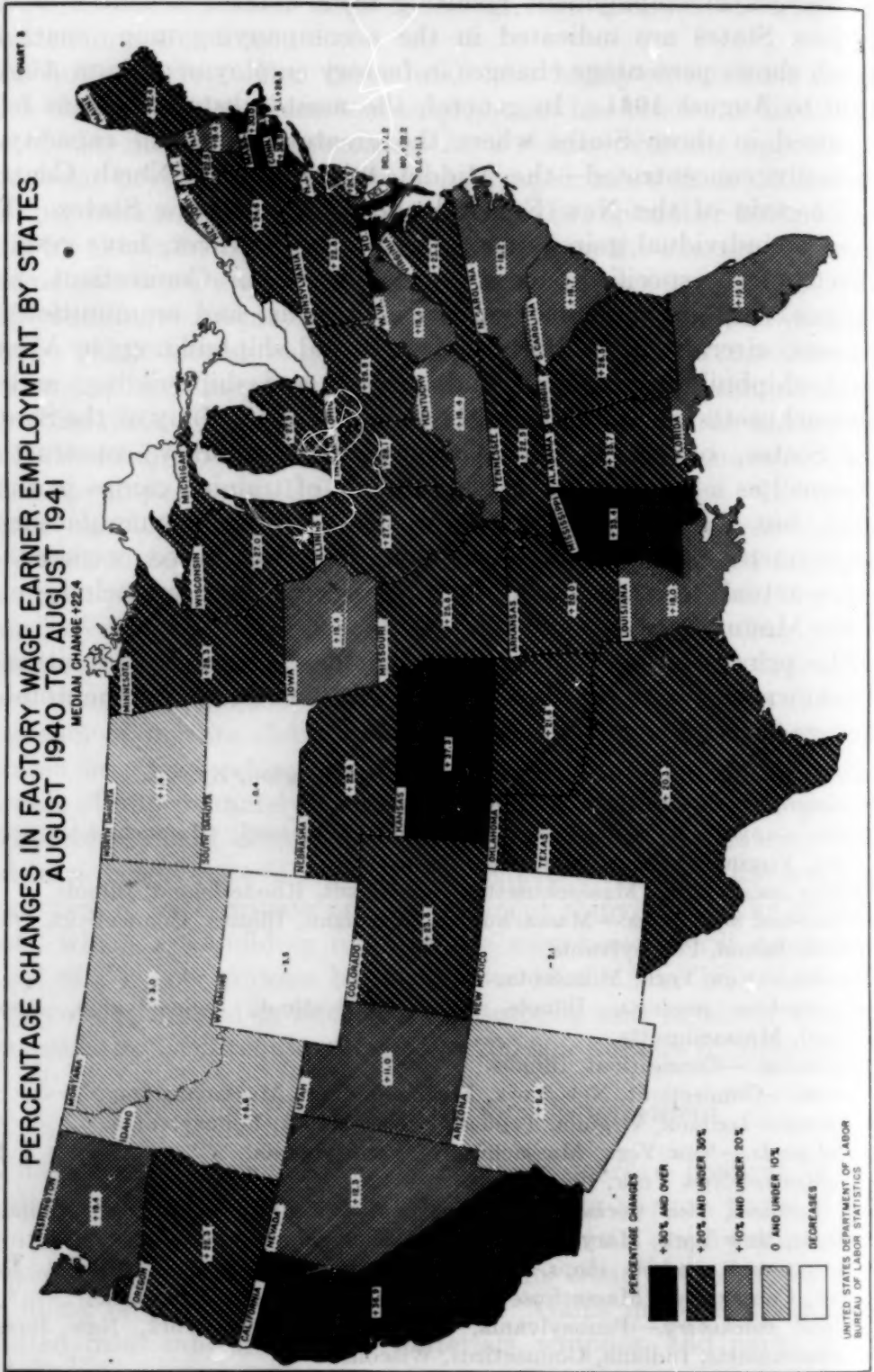
Optical goods.—New York, Massachusetts, Pennsylvania.

Instruments.—New York, Illinois.

Blast furnaces, steel works, and rolling mills.—Pennsylvania, Ohio, Indiana, Illinois, New York, Maryland, Alabama, Michigan, New Jersey.

Foundries and machine shops.—Ohio, Pennsylvania, Wisconsin, Illinois, New York, Connecticut, Massachusetts, Indiana, New Jersey, Michigan.

Electrical machinery.—Pennsylvania, Ohio, Illinois, New York, New Jersey, Massachusetts, Indiana, Connecticut, Wisconsin.



Aluminum (exclusive of aluminumware).—Pennsylvania, Tennessee, New Jersey, Michigan, Ohio, New York.

Smelting and refining—Copper, lead, and zinc.—Pennsylvania, New Jersey, Illinois, Texas.

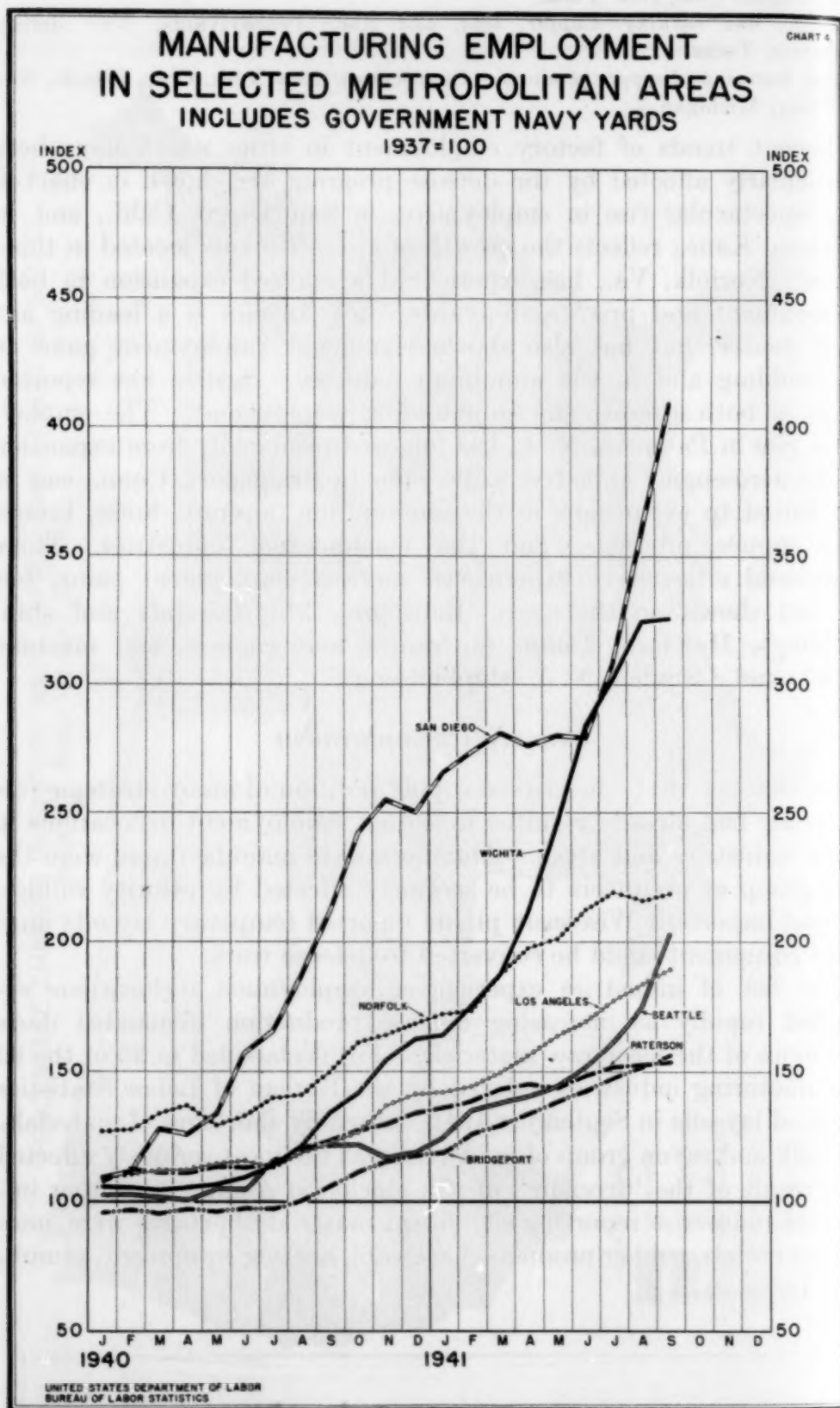
Brass, bronze, and copper products.—Connecticut, New York, Ohio, Illinois, New Jersey, Michigan.

Recent trends of factory employment in cities which have been particularly affected by the defense program are shown in chart 4. The spectacular rise in employment in San Diego, Calif., and in Wichita, Kans., reflects the growth of aircraft plants located in those areas. Norfolk, Va., has experienced a marked expansion in both Government and private shipyards. Los Angeles is a leading aircraft center, but has also shown significant employment gains in shipbuilding and in the aluminum industry. Seattle has reported gains in both aircraft and shipbuilding employment. The employment rise in Paterson, N. J., has followed principally from expansion in the aero-engine industry, while gains in Bridgeport, Conn., can be attributed to expansions in the ammunition, aircraft, brass, bronze and copper products, and the machine-tool industries. Three additional cities have experienced marked employment gains, but are not shown on the chart—Baltimore, Md. (aircraft and shipbuilding), Hartford, Conn. (airframes, aero engines, and machine tools), and Camden, N. J. (shipbuilding).

Priority Unemployment

By October 1941, the critical supply position of many strategic raw materials had already resulted in serious employment dislocations in many industries and areas. Aluminumware manufacturers were the first group of producers to be seriously affected by priority rulings. Several important Wisconsin plants reported temporary lay-offs until plant equipment could be converted to defense work.

The list of industries experiencing employment dislocations expanded rapidly as increasing defense production demanded more and more of the basic raw materials. Firms classified in 35 of the 90 manufacturing industries indexed by the Bureau of Labor Statistics reported lay-offs in September 1941, caused by shortages of materials. The silk and rayon group of industries was the most seriously affected as a result of the "freezing" of silk stocks on August 2. Other important industries reporting significant material shortages were non-ferrous metals, rubber products, hardware, heating equipment, plumb-



ing supplies, electrical household appliances, radios, jewelry, and stamped and enameled ware. In addition, steel mills reported a shortage of scrap and several shipyards were unable to obtain steel.

The automobile industry planned to speed up production of tanks, aero engines, aircraft, and ordnance as a means of providing employment for at least 100,000 automotive workers expected to be out of jobs under the current quotas for the 1942 model year. In September 1941, only 56,700 automotive wage earners returned to work after the August shut-down, compared to a rehiring of 107,500 workers in September 1940. The fact that several major defense plants operated by automobile companies would not begin volume production until the spring of 1942 indicates that a substantial net decline in employment of automobile workers was expected this winter.

The 15-percent differential on contract and subcontract bids allowed to nondefense plants in critical areas "certified" by the Office of Production Management should hasten the conversion of plant facilities to defense production and help to take up the slack of priority unemployment. Defense production, which is concentrated currently in the plants operated by major producers, will require that more of the facilities of small producers be brought into the defense effort. Extensive subcontracting must be programmed in order to insure speedy and efficient use of available men and machines and to keep dislocations at a minimum.

INDUSTRIAL CONSERVATION IN THE FIRST WORLD WAR ¹

THE industrial conservation program of 1917-18 aimed primarily at obtaining the maximum production of military goods and services without abandoning the essential framework of the Nation's industrial organization.

The term "industrial conservation" is here used in its broadest sense and includes the ideas of priority, economy, and conversion of existing industrial equipment, as well as of standardization, simplification, substitution, and curtailment.

Conservation is a function of a straining economy. In wartime a greatly increased proportion of the Nation's raw materials, capital investment, transportation facilities, and manpower must be diverted to the military effort. As the economy approaches total warfare the question arises as to how to mete out the decreasing remainder equitably to nonwar activities. This problem arose in 1917. It is with us today.

Conservation had its roots in the priority program, and that program was at every stage tied up with the supply of iron and steel. The first Government contracts for munitions went to the big plants whose output accounted for a large percentage of the total annual consumption of iron and steel. When it became necessary, after our own military program got under way, to ration the limited supply of iron and steel, the industries of the country saw, if only dimly, the sacrifices they must make. These fell most heavily, however, upon the smaller and scattered industries, whose whole industrial life was in jeopardy. The civilian population never fully realized the implication of these restrictive measures, since the conservation program had not become fully operative when the armistice was signed.

Early Conservation Activities

The Council of National Defense made two important moves toward conservation early in the spring of 1917. It created the Munitions Board to coordinate Army and Navy purchases, and gave it responsibility for the allocation of materials to industrial plants and delivery of products to the contracting parties. It also established the Commercial Economy Board "to confer with businessmen as to ways to reduce needless activities."

Confusion resulted from the speed with which the war program developed, the innumerable orders from rival governmental agencies for munitions and equipment, and the mushroom growth of defense

¹ Prepared by Stella Stewart, of the Bureau's Prices and Cost of Living Branch.

agencies. In July, the War Industries Board was created within the Council of National Defense to act as a clearing house for Government wartime needs. It absorbed the Munitions Board and other important committees of the Council. It acted in an advisory capacity only.

As early as April 1917, there were two very different conceptions of the methods to be adopted for decreasing the normal use of materials, capital and labor in favor of the huge war production effort. One group, including the Army and the Navy, was for an "all out" program at any cost. The other approach to increasing production of war materials is well stated in a letter addressed to Mr. Baruch by the chairman of the Commercial Economy Board, who did not believe in crippling or abandoning nonwar activities beyond the actual necessity of the time:

Early in April, I prevailed upon the Council of National Defense not to follow a plan that had been submitted to them to eliminate nonessential businesses, but to cut out nonessential uses of labor, materials, capital and equipment from * * * the large volume of essential businesses. * * * The fat could be taken off all business for war purposes but the skeleton and vital organs must be left, for business would be called upon to reabsorb the fighting forces into the industrial army as rapidly as possible after the war was over.

The Economy Board early instituted a campaign to increase efficiency and release men and material by cutting down waste, first in the distributive field and later in production. In conference with industry representatives it developed plans for reducing the wide variety of woolen fabrics; the number of models for men's and women's garments and for footwear; and it participated in a Nation-wide campaign for reduction of waste in the manufacture and sale of bread. This was the beginning of that phase of the conservation program strictly defined as standardization and simplification. It bore fruit later when the need for greater economy in the use of materials and men became crucial.

Production for war led to shortages where they were least expected. The complexities and interdependence of industries created a variety of problems. The iron and steel situation grew more serious day by day. The implications of interference with normal industrial activity was grasped very slowly, not only as it affected industries manufacturing direct war materials, but also its effect upon all industry from which must come indirect contributions of materials and men. The American people found it difficult to believe that their way of living was to be greatly modified.

Although the major conservation activity lay in the slowly developing priority program, there was one serious obstacle in the way of its successful operation. This was the clash of interests within the Government itself. The priority program was threatened with a

complete break-down because of the continued use by the Army and Navy Departments of their commandeering powers over firms which were already employed full time on Government contracts or whose entire output was already allotted.

The first legal sanction for making priority orders mandatory came with the passage of the Fuel Control Act and the Preferential Shipments Act in August 1917. Under this legislation fuel and railway cars could be refused to any recalcitrant producer. Except for the problem of commandeering, these powers proved sufficient, even when other legislation came later. Following the passage of these acts the Priorities Division was again reorganized and its functions and duties were expanded. Judge Edwin B. Parker became its chairman and was in charge of policy. The administration of priority of transportation under the Preferential Shipments Act was under the direction of Judge Lovett who was himself a railway executive.

On September 21, 1917, the first formal Priority Circular was issued. It announced the rationing policy for iron and steel, meting out such supplies as were not deemed necessary for the manufacture of munitions to the industries "not essential to the military program, or necessary to the maintenance of national vigor."

Crisis of the Fall of 1917

Although the public heard much about the cooperation of industry with the Government's program, many manufacturers simply could not foresee nor accept the necessity for the stringent measures which the Government was later obliged to undertake. Agitation and alarm resulted from the widespread discussion of the abandonment of "nonessential" industries. The Advisory Commission and the chairman of the Priorities Division strongly urged upon the Council of National Defense the announcement of an industry policy, but the only public statement forthcoming was a request made early in October that no new enterprises be undertaken that were not "fundamental to the efficient operation of the country's necessary activities."

Judge Parker maintained that the shortages of labor and materials in defense industries were bound to drain heavily from those in secondary positions, that priorities could solve only a portion of the problem, and that an effort should be made to convert industries rather than destroy them. He therefore requested the legal staff of the Priorities Division to study the whole problem carefully and to submit proposals for dealing with it.

Two of these memoranda, differing in concept but both recognizing the predicament which faced the Government's policy makers, warrant a careful study today. Briefly, they favored a licensing system for enforcement of any forthcoming regulations and a more

comprehensive use of priorities with enforcement powers. Labor shortage was the key problem and the most difficult to solve.

PROBLEM OF NONESSENTIAL INDUSTRIES

The attitude of the Federal Reserve Board toward extension of credits tended to increased the confusion. It released the following statement:

The different industries of the country have priority upon the fluid credit of the Federal Reserve System in the order of their importance (embargo of credit to nonessential enterprises). War now being the Nation's business, it would be proper for the Federal Reserve Board and banks to fix discount rates with a view to accommodating commerce and business to the degree in which they contribute to war production.

One editorial comment upon this statement was:

And just what are the nonessential enterprises, in a complex and "double and twisted" business system? Does not agriculture sustain manufacture and manufacture sustain agriculture? And does not one division of these industries sustain another? And do we not all advance together, or go backward together, save for the effects of incompetence and personal disaster?

On November 1, the director of transportation priority released an order denying the use of open-top freight cars for carrying materials and supplies for road building and for manufacture of pleasure vehicles, including passenger automobiles, furniture, and musical instruments, and for transportation of the latter articles when completed. Although he stated that the ruling was occasioned by the undue use of cars for transportation of less essential commodities, this move was heralded as "the forerunner of a series of Government regulations to curtail or stop completely the production of all articles which are not necessary to the prosecution of the war and the well being of America's civil population."

The Iron Age said editorially: "One unfortunate feature in connection with the elimination of the unessentials in industrial activity is that it comes after the general principles of the selective draft have become established. It would have helped greatly if it had been possible to know when the draft was first applied, how the Government was going to classify industries as to essential and nonessential." It then discussed the problems of securing skilled workers, which might have been avoided if industries had been classified as to their importance in the war program, thus simplifying the replacement of men.

Early in November 1917, the Ordnance Bureau of the War Department, with the assistance of the War Industries Board and the Iron and Steel Institute placed contracts for 6½ million shells. These were of great military importance and the distribution of the orders for iron and steel was done with great secrecy. These orders took

priority over all other orders on the books of the steel mills; the priority orders themselves were filed in many cases after allocations had been made.

These contracts constituted an embargo upon the use of chrome steel by manufacturers of automobiles, and the move was taken without their knowledge. There was consternation when the placing of the embargo, coupled with the priority ruling against the use of freight cars for shipment of passenger automobiles, crystallized an earlier feeling within the automotive group that passenger cars were about to be classed as "nonessential."

Although the Council stated that the move was not intended as discrimination against a single industry, it was felt that the Government should not take so important a step until a general plan had been formulated. As it turned out, most of the leading manufacturers were "understood to be well protected in the matter of stocks of chrome steel and so the concern was greatest among the less-favored manufacturers."

Automobile manufacturers protested that such a curtailment should not be made without advance notice. This protest, voiced at one of a series of conferences between the automobile manufacturers and the War Industries Board, caused a suspension of the order. However, a substitute proposal for a 15-percent curtailment of the production of pleasure cars, to be gradually increased to 40 percent, showed the inevitable trend. It was also suggested that the Government place orders for shells, which required the use of chrome steel, with those automobile factories equipped for the work. This series of conferences and the ruling on use of freight cars gained wide publicity, and it became necessary for the priority director to assure industry that thereafter no action would be taken without giving reasonable notice and an opportunity for a hearing.

About November 15, the Commercial and Financial Chronicle carried an announcement concerning a list of more than 500 commodities deemed nonessential for the prosecution of the war. This list had been prepared by "The Railway War Board" (a committee of railway executives) at the request of the acting chairman of the War Industries Board. It had never been released, but even the news of its existence caused consternation.

The director of the Council felt obliged to announce that a plan was being formulated for curtailment of industry without making drastic changes and that it would be done in cooperation with manufacturers. No arbitrary classifications would be made, but all action would be based on the Government's need for the available supply of raw materials, coal, and transportation. He outlined a Bureau of Manufacturing Resources to be established within the War Industries Board to advise as to distribution of war orders among the less essen-

tial industries and to assist in the further mobilization of industry behind the war. This Bureau later aided in establishing regional offices which, although they were advisory only, constituted local war industries boards.

About this time the Council of Defense was reorganized because of the limitations of the Lever Act under which no Council Committee memberships could be held by men interested in Government contracts. The Council then requested that industry committees be so organized as to represent fully every branch of industry, in conference with the Council and the War Industries Board. This was the origin of the War Service Committees. Thus, Government and industry, representing demand and supply, could be brought together. These committees served in an advisory capacity throughout the war, supplying industry data to the Government and representing industry before the Government.

In December the Council of National Defense adopted a resolution again protesting against the ineffectual operation of priorities, resulting from the unwise use of commandeering powers. The immediate occasion of this resolution arose from orders of the Navy upon manufacturers of duck, although "it is proclaimed by the Navy that they have no interest other than to get what they want when they want it, at the lowest price they can." The Secretaries of the War and Navy Departments agreed to abide by the resolution, but there is considerable evidence that this conflict continued well into 1918.

The year 1917 therefore drew to a close with industry not yet lined up fully for defense. This was due in part to a lack of Government policy, but more perhaps to the lack of a central control with sufficient authority to carry out its regulations.

The Coordinated Program of 1918

A consciousness of the implications of the military program was dawning in the minds of industry and of the general public. More orderly procedures were developing in the emergency agencies. There was more recognition of the enforcement power already available in existing legislation. There was, however, no one central agency authorized to exercise this power over both industry and other Government agencies in the interests of an integrated program.

On December 28, 1917, the President assumed control of the country's railroads and sufficient authority was then available for ironing out any transportation problems arising from lack of unified action.

PRIORITIES FOR USE OF COAL

In January the Fuel Administration called a conference of more than 100 industries not engaged in war work to discuss its "coal-budget" plan. This was one of the results of the recently announced

policy of the Council of National Defense to insure the less essential industries a hearing and an opportunity to cooperate in any necessary curtailment of their activities. A frank statement was made of the fuel available for their use, and they were asked to assist in making the restrictions bear as lightly as possible. This move came at an opportune time, for there was extreme opposition to the idea of cutting off any industry entirely.

The official announcement made at this time follows in part:

Committees representing the large industries not engaged in war work—more than 100 in all—will be called into conference with the officials of the Fuel Administration. They will be shown the amount of coal available for all purposes, the amount required for war purposes and domestic consumers, and the total curtailment of the use of coal which must be effected to satisfy these demands. They will be asked on patriotic grounds as well as for their own future interest to volunteer in behalf of their industry a reduction of the coal consumption for the year 1918. They will be asked to show the Fuel Administration the best method of accomplishing this curtailment. They will also be asked to advise the Fuel Administration as to how to arrange these restrictions so as to affect only the less essential portions of their own business if possible. * * *

It is believed that the operation of this plan of voluntary conservation on the part of nonwar industries will forever lay the ghost of the "cut off the nonessential industries" agitation, which has been going on since the United States entered the war, and automatically will balance the relation between the production and consumption of coal and prevent any repetition of the present coal shortage. * * *

These industries, sometimes miscalled "nonessential industries," it is pointed out, are the backbone of the country's economic system. They employ 10,000,000 workers and from them must come the taxes and bonds which will pay for the war. These industries have never objected to any curtailment of coal or material or men which could be shown to be necessary to win the war. It was the indefinite threat of annihilation by restrictive orders which during the last 2 or 3 months has alarmed the leaders of business and finance.

The percentage of reduction asked of the different industries by the Fuel Administration will, of course, vary, partly upon advice of the leaders of the industry, as to what is practicable and safe shrinkage as compared with the great business activity of 1917; partly, also, it will vary with the character of the business. In proportion as an industry contributes less to the war of domestic necessities, it will naturally increase its contribution of self-limitation. * * *

It will be seen that this plan, if completely successful, will quickly solve the fuel problem and will introduce a new and valuable principle into the settlement of many difficult war problems. First: Advantage is taken of the unquestioned patriotism of a large majority of businessmen to devise with their aid an intelligent program of curtailment, sufficient for Government purposes but not destructively exaggerated. Second: An order of the Fuel Administration backed by the authority and penalties of the Lever Law will compel an equal compliance by every member of each industry and would assure those who would gladly make their share of the sacrifice that no advantage will be taken of their patriotism by unscrupulous competitors. All are placed on the same basis.

The announcement of this plan constituted a recognition by the Government that industries could not be separated into zones of "black" or "white" but that all must receive some consideration in any plans for the welfare of the country.

Unfortunately the timing of this plan coincided with a request from the Railroad Administration for cooperation from the Fuel Administration in relieving freight congestion by prohibiting or diverting coal movements east of the Mississippi River. This move aroused so much concern and criticism that sight was lost, momentarily, of the desirable aspects of the budget plan. Business was suspended in some plants for a 5-day period in January, and Monday closing was general.

CONSTITUTION OF WAR INDUSTRIES BOARD AS INDEPENDENT AGENCY

The President had become convinced that the whole industrial mobilization program was halting and confused for lack of centralized control. In February, at his request, a bill was introduced into Congress which would enable him to delegate to some one agency or individual the powers already exercised by the Army and the Navy. This, in fact, meant that rulings of the Chairman of the War Industries Board would be supported by the President as final and authoritative.

On March 4 the War Industries Board was made an agency independent of the Council of National Defense and responsible to the President only. The latter gave his full support to Mr. Baruch whom he had asked to become chairman.

The War and Navy Departments were to determine requirements and place contracts, but the Board would be the department of supply. Conversion of facilities, final determination of priority of production and delivery, and conservation of resources were specifically named by the President as part of the Board's functions. "The ultimate decision of all questions except the determination of prices should rest always with the chairman."

The Board was enlarged and took over many of the committees of the Council. A pattern began to form, as divisions, committees and sections which in themselves were competent, were made a part of a functional program.

The Priorities Board was shaped into a policy group and included representatives from key agencies. A Priorities Committee acted as administrator under the Board.

The Commercial Economy Board became the Conservation Division. For a year it had been laying a foundation upon which was erected much of the later conservation program. Daily conferences were held with industries which made undue inroads on the supply of strategic materials or of labor. Plans for standardization and simplification of products in line with needs as indicated by the Priorities Board were already well under way.

The Resources and Conversion Section, organized in May and including representatives of other key agencies, carried on the study of existing facilities and developed plans for conversion of plants whose

facilities were not fully adapted to war work. As this work was too comprehensive to be carried on effectively from a central office, regional offices were opened, having a director in the principal center and a member representing each of the important industries in that area. These offices acted as local war industries boards but in an advisory capacity only, supplying the Washington office with much-needed information regarding local conditions and interpreting general policies of the War Industries Board to industry in each region.

The ghost of the problem of "nonessential" industries had not yet been laid. As a result of a request, in April, by the Chairman of the War Industries Board, the Council supplied a list of 45 industries whose work was considered absolutely essential to the war program and which would be given preference by the Priorities Board.

The Conservation Division, with the new powers of the Board behind it, increased its work of reducing the number of different types, patterns, and styles of articles manufactured, and required substitution of more plentiful for less plentiful materials.

CONSERVATION PROCEDURES UNDER WAR INDUSTRIES BOARD

No move was undertaken until after conferences with the appropriate commodity section of the War Industries Board and with the War Service Committees, nor until the Conservation Division was certain that the moves to be undertaken would cause the least possible disturbance to the industry involved.

Tentative schedules of regulations prepared after conference, were submitted to manufacturers and to retailers for comment, before the final regulations were announced. The object of this was, of course, to protect an industry against injustice. When finally agreed upon each manufacturer and dealer was required to give a pledge to observe the requirements of the agreement. So large a percentage of each industry cooperated heartily that the unwilling few were swept into line.

The plan of conservation laid down by the Division for the guidance of the commodity sections and of its own agents was to undertake studies of industries, particularly those in which there were shortages of materials, facilities, or labor, with a view to formulating sets of regulations to accomplish one or more of the following purposes:

1. To secure all feasible reductions in the number of styles, varieties, sizes, colors, finishes, etc., of the several products of the industry in question. This would accomplish economies in the manufacture by reducing the number of operations, and the amount of reserve stock, raw and finished, which had to be carried; it would speed up the turn-over, reduce the labor and expense of selling, and decrease the loss due to depreciation.
2. To eliminate styles and varieties of article which violated the principle of economy in the use of constituent materials; for example, garments requiring unusual yardage could be eliminated.

3. To eliminate features of adornment which added nothing to the usefulness of articles.
4. To reduce the production and sale of such articles as were of lesser importance for the comfort and satisfaction of the population.
5. To foster the substitution of articles and materials which were plentiful for those which were scarce and difficult to produce.
6. To discourage the use for unimportant purposes of articles which were needed for more important purposes.
7. To standardize sizes, lengths, widths, thicknesses, weights, gauges, etc., in such a way as to preserve sufficient strength and durability, but to effect economies in materials and labor.
8. To reduce the waste of materials in manufacturing processes generally.
9. To secure economies in the use of samples for selling purposes.
10. To secure economy in containers by eliminating the smaller and odd sizes.
11. To secure economy in packing by increasing the number of units per package.
12. To secure economy in shipping space and packing materials by baling instead of boxing wherever this was practicable.

The following are examples of the economies effected by this Division:

- (a) Elimination of the practice of weighting silk with tin. This saved about 300 tons of tin.
- (b) Regulation of sizes of spools and number of yards of thread per spool. This economized in material and labor and guaranteed the purchaser against changes in yardage in order to maintain a price level.
- (c) Extension of restrictions in the shoe industry to limitation of styles, colors, and lasts.
- (d) Reduction of 312 sizes and styles of plows to 76.
- (e) Production, by manufacturers of woolen fabrics, of fewer new lines; reduction in sizes of samples; simplification of styles by manufacturers of men's and women's garments, and reduction in number of models. All these measures resulted in a considerable saving in yardage.

The above are only indicative of thousands of similar actions, no one of which bore too heavily on either industry or the civilian population, but which in the aggregate resulted in notable saving of labor, materials, and shipping space. The industries which were restricted in some degree through the efforts of this Division are shown in the accompanying table.

Regulations of Conservation Division Relating to Restricted Industries, 1918¹

TEXTILE PRODUCTS AND CLOTHING

Date announced	Industry	Type of conservation	Comments ²
June 15.....	Boys' and children's clothing; women's garment.	Limited number of styles, and reduced wasteful use of material.	Saving of "15 percent of total yardage normally used"; 20 to 25 percent saving of material.
June 22.....	Men's and youths' clothing.	Limited number of models, length and sweep of coats, etc.	Average saving per garment 12 to 15 percent. Expansion of program for fall of 1918.
June 29; supplement Sept. 30.	Shoe.....	Limited colors and height, and reduced wasteful use of material.	Tanners' colors reduced from 81 to 3. Shoe manufacturers reduced line about two-thirds, retailer likewise.
July 12.....	Drygoods, wholesale.	Reduced number of samples per salesman; substituted photographs and lithographs.	Trunks per salesman reduced 44 percent. Shipping space saved.
July 16.....	Waist.....	Specified packaging: Better grades, 2 to the box; others 12 to the box.	Annual saving of 35,000,000 cardboard boxes.
Aug. 19.....	Men's, women's, and children's hat.	Limited shapes, colors, and sizes.	Large saving of shellac, fur, and rubber cement.
Sept. 13.....	Thread.....	Specified number of yards per spool.	Saved "lumber, labor, and shipping space," equivalent to 600 cars per year.
Sept. 13.....	Felt shoe.....	Reduced number of colors and weights to 4.	Annual saving of 15 percent of felt.
Sept. 27.....	Sweaters and knitted textile.	Restricted use of wool; limited lengths and colors.	Saving of 33 percent in use of wool.
Oct. 1.....	Hosiery, underwear, and other knit goods.	Curtailed use of pasteboard packing boxes; substituted wrapping paper. Eliminated tin-plate package boxes.	Annual saving of 17,312 railroad cars, 141,800,000 cartons, 500,000 wooden packing cases.
Oct. 5.....	Book cloth.....	Standardized length and width of rolls and reduced colors 50 percent.	
Oct. 5.....	Typewriter ribbon.	Curtailed tin boxes and tin foil 100 percent; reduced number of colors.	Annual saving of 395 tons steel, 7 tons of tin.
Oct. 25.....	Straw, Panama, and body hat.	Limited shapes and sizes.....	One manufacturer's sample line reduced from 4,000 to 144.
Not issued..	Commercial rug and upholstery batt.	Standardized grades and qualities; curtailed use of bleach.	
Not issued..	Bedding.....	Restricted type and weight of tickings.	
Sept. 30.....	Corset.....	Specified width and thickness of steel stays; limited styles; curtailed use of tissue paper and special boxes.	Saving of 1,229 carloads of freight space.

LEATHER AND RUBBER PRODUCTS

July 30.....	Automobile tire...	Limited types and sizes.....	Eliminated waste of rubber and released inventory capital.
Aug. 2.....	Trunks and traveling goods.	Limited sizes; specified maximum size.	Eliminated trunks over 40 inches, for example, to save railroad space.
Sept. 8.....	Solid automobile tire.	Limited types and sizes.....	Reduced number from 125 to 14.
Sept. 13.....	Rubber footwear..	Reduced number of styles and specified packaging.	Saving of 29,012,600 cartons, 30,380 gallons of varnish, 5,245,300 square feet of shipping and storage space.
Sept. 27.....	Bathing cap.....	Limited color and style.....	1 per manufacturer.
Oct. 5.....	Harness and saddlery.	Limited styles and types.....	Number reduced 88 percent.
Oct. 26.....	Calendered rubber clothing and raincoat.	Standardized sizes; eliminated special numbers and specified packaging.	Annual saving of 650,000 cartons, 6,500 pounds of paper, 75 carloads of freight space, and 404,950 square feet lumber and others.

¹ Data are from Report of Conservation Division, as included in Final Report of the Chairman of War Industries Board to President, February 1919. (Printed by Nye Committee.)

² Unless otherwise noted, all savings are computed on annual basis.

Regulations of Conservation Division Relating to Restricted Industries, 1918—Con.

PRODUCTS RESTRICTED BECAUSE OF IRON AND STEEL

Date announced	Industry	Type of conservation	Comments
Apr. 26	Portable grain elevator.	Reduced number of sizes.	
May 28	Plow and tillage implement.	Reduced number of sizes from 312 to 76.	
June 17	Furnace.	Eliminated styles using steel and iron excessively.	
July 1	Grain drill and seeder.	Limited number of sizes.	
Do.	Harvester, mower, and hayrake.	do.	
Do.	Ensilage machinery.	do.	
July 12	Stove and range.	Standardized types, patterns, and sizes. Curtailed tin linings, back guards, tea shelves, etc., 100 percent.	
July 15	Spring-tooth harrow.	Reduced number of sizes.	
Do.	Metal bedstead.	Limited styles; eliminated some uses of metal.	Saving of 33½ percent in steel used.
July 18	Farm wagon and truck.	Reduced number of sizes for various parts.	Reduced spring-wagon wheel-sizes, for example, from 32 to 4.
July 22	Bed davenport.	Standardized patterns and woods used; curtailed use of wool and mohair fabrics, etc.	
Aug. 7	Steel pen.	Reduced styles and eliminated small packages. Curtailed brass pens 100 percent.	Saving of 1,800,000 cartons.
Aug. 10	Southern plow and shape.	Limited number of sizes.	
Aug. 12	Land roller and pulverizer.	do.	
Aug. 19	Refrigerator.	Cut grades to 2, reduced use of tin and steel. Substituted zinc linings for steel.	Saving of 16,000 tons of steel.
Aug. 20	Burial goods.	Eliminated brass, bronze, and copper caskets; limited styles and sizes; specified types of covering materials and linings.	Saving of large quantities of metal, coal, and wool fabrics.
Aug. 21	Vacuum cleaner.	Sizes limited to 2; discontinued less essential attachments.	Saving of 100 tons of steel, 125 tons of aluminum, 5 tons of brass, and 1,000,000 feet of rubber hose.
Aug. 26	Trace chain.	Reduced varieties from 504 to 72; curtailed twist link and copper finish 100 percent.	Large saving of steel.
Sept. 6	Hatchet and handled hammer.	Standardization (tentative).	
Sept. 16	Furniture.	Reduced patterns 50 percent; prohibited new patterns. Curtailed many uses of metal 100 percent. Limited leather colors and use of glass. Shipped in "knocked down" form whenever possible.	Saving of 4,856 tons of steel, 1,500 tons of brass, and 44,000 carloads of freight space.
Sept. 17	Washing machine.	Reduced styles and sizes from 446 to 18.	
Do.	Motion-picture machine.	Limited lens sizes; eliminated certain accessories.	Saving of 52 pounds of steel per machine.
Sept. 19	Cream separator.	Reduced number of sizes.	
Sept. 26	Electrical heating appliance.	Limited styles and types.	
Sept. 26	Oil and gasoline stove, heater, and oven.	Eliminated 127 sizes and styles.	Saving of 25 percent on iron and steel
Sept. 30	Bicycle.	Limited each manufacturer to 3 lines, with 1 line in 2 sizes. Eliminated juvenile and racing models, and numerous unnecessary features.	Saving of 2,265 tons of steel, reduction of inventory capital, economy in shipping space.
Sept. 30	Clock and clock-watch.	Limited styles per manufacturer.	
Oct. 1	Radiator.	Allowed 1 style per manufacturer; limited shapes and sizes.	
Oct. 22	Horse shoe, nail, nut, bolt and rivet.	Where possible substituted wooden hoops for iron hoops in packaging.	
Oct. 25	Pocket cutlery.	Limited basic and catalog patterns per manufacturer.	
Oct. 28	Talking machine.	Limited models and finishes; curtailed use of metal. Curtailed new records 50 percent.	

Regulations of Conservation Division Relating to Restricted Industries, 1918—Con.

PRODUCTS RESTRICTED BECAUSE OF IRON AND STEEL—Continued

Date announced	Industry	Type of conservation.	Comments ¹
Oct. 30.....	Fan motor.....	Limited styles and types.....	
Oct. 30.....	Industrial lighting fixture.....	do.....	
Oct. 30.....	Panel board and switch board. Other electrical equipment.	do.....	

PRODUCTS RESTRICTED BECAUSE OF TIN OR OTHER NONFERROUS METALS

Aug. 24.....	Children's vehicle.....	Standardized types and models. Curtailed use of tin 100 percent.	Saving of 75,000 pounds of pig tin and 2,335 carloads of freight space.
Aug. 26.....	Camera.....	Wherever possible substituted zinc for aluminum.	
Oct. 25.....	Food chopper.....	Limited styles and sizes. Curtailed use of pig tin.	
June.....	Babbitt, solder, tin foil, silk dyeing etc.	Industries reduced use of tin as much as possible.	
In progress.	Oil refining.....	Saved tin plate and conserved sulphuric acid and caustic soda.	

MISCELLANEOUS

Jan. 21.....	Paint and varnish.....	Limited colors of paint and grades of varnish; specified and reduced package sizes.	Reduction of 60 percent in variety.
Sept. 18.....	Chinaware and crockery.	Limited number of items.....	

There still existed a feeling that the War Industries Board was unwilling to compel industry to restrict its output sufficiently. There were some who demanded "a virtual scrapping of many industries." In the main these demands were made by groups of individuals who could not comprehend the effect, upon the country as a whole, of extinguishing one industry after another. On the other hand, there can be little doubt that some of the larger and better-organized industries pitted their influence against that of the War Industries Board with considerable success.

It was the consistent attitude of the Board and of the members of the Advisory Commission to the Council that there were "only many grades of relative immediate utility" and that every industry should be allowed to keep enough of its organization so that when peace came it could be "expanded rather than reconstructed." To men in daily touch with the problems of both industry and labor it seemed wise to preserve the nucleus of trade connections, prevent shocks to the credit structure and to labor, and think somewhat in terms of postwar conditions.

APPOINTMENT AND WORK OF INDUSTRIAL ADJUSTMENT COMMISSION

However, the mounting criticism forced the President to appoint an Industrial Adjustment Commission in June 1918 to attempt to settle once and for all the question of the suppression of industry.

This commission was composed of the heads of the emergency agencies; neither the Army nor the Navy was represented.

The Commission appointed a working committee composed of executives in Government agencies representing industry who had expert knowledge of the problems of industry, labor, and the credit structure. This committee reported to the President on June 22 that, after a mature consideration of all of the facts presented for its use, it recommended against the prohibition of any industry and in favor of general and gradual curtailment. The committee was composed of the Chairman of the Priorities Board, the Chairman of the War Labor Policies Board, and of representatives from the War Trade Board, the Food Administration, the Shipping Board, the Fuel Administration, and the Treasury Department.

This group now became a permanent committee of the Priorities Board, with the Assistant Priorities Commissioner as its executive officer. It was in almost continuous session. Its first consideration was given "to forecasting the effects of the extension of the rules of priorities." From the beginning its program provided for curtailment of production on a percentage basis for a fixed period in 1918, the percentage to be computed upon the basis of output for a corresponding period in 1917. No curtailment was undertaken without the full knowledge of the industry concerned. The greatest war need of this period was iron and steel. Individual curtailment was first undertaken in the nonwar industries which used a considerable tonnage of this material.

OPERATION OF CURTAILMENT PROGRAM

On August 6 the passenger-automobile manufacturers "voluntarily" offered to reduce their output by 50 percent, but did not indicate any basis for arriving at the 50-percent reduction. The Priorities Committee, however, announced a curtailment to 25 percent of the 1917 production for the last 6 months of 1918, provided "the manufacturer will limit his purchases of materials, equipment, and supplies to such as are absolutely necessary to match up stocks on hand."

The War Industries Board released Priority Circular No. 5 on July 22. It was addressed to "producers, manufacturers, dealers, and consumers" of iron and steel. It set forth in great detail the plan for rationing iron and steel to those industries which could exist only if they were allowed some percentage of their normal consumption. It referred only indirectly to the program of the Industrial Adjustment Commission and emphasized the care being exercised by the War Industries Board to insure full justice to all parties.

The general public accepted this constructive plan for regulation of industry with a feeling that it came far later than it should have.

On August 23 the New York Times commented on the necessity for cooperation from both manufacturers and civilians in carrying out the regulations. On September 29 it quoted Mr. Baruch as saying that curtailments would become increasingly stringent as the war progressed. The program was extended throughout the summer and fall of 1918.

Lists of industries working under the curtailment program were announced from time to time, and although the war ended before the program was fully operative savings of materials and labor were already in evidence.

When the curtailment program became operative, manufacturers in the curtailed industries were required to submit records of supplies and requirements and to pledge full cooperation. Allotments of materials were then made on Industry Priority Certificates and orders were drawn against these allotments.

The War Service Committee of each industry was expected to insure compliance from its industry and violations of the provisions were reported to the legal division of the War Industries Board.

In spite of the considerable curtailment which had already been undertaken, the Priorities Commissioner on October 29, 1918, submitted a memorandum to all commodity section chiefs of the War Industries Board stating that it was imperative that the production of all nonwar industries should be promptly and substantially curtailed in order to release labor as well as materials, transportation, fuel, and electric energy. He asked the section chiefs to forward immediately lists of industries whose production could be curtailed without interfering with the war program.

A review of the responses, as they are preserved in the Archives, indicates that the armistice interfered with full compliance with this request.

The following list submitted by the hardware section is worthy of attention in view of today's metal conservation program.

Metal furniture and lockers.	Shears and scissors.
Cast-iron hollow ware—30 percent.	Andirons, etc.
Textile machinery.	Steel and brass letter boxes.
Wire goods	Candlesticks.
Marine hardware.	Chandeliers.
Miscellaneous cast-iron products.	Cuspidors.
Drapery hardware.	Oilers.
Bathroom fixtures.	Skates.
Stovepipe.	Thermometers.

In spite of the program for the furniture industry, the chief of the farm implement and wood products section stated that it was estimated that furniture factories throughout the country were working at approximately 60 percent of normal. Any further curtailment of the wood and furniture industry would cause a complete shut-down of

that industry. It was recommended that if the furniture industry was to be curtailed further, without partiality to any section of the industry, it should be made upon the basis of a 40-percent reduction as of units manufactured during 1917.

The chief of the wool section reported that no allocations of wool were being made for any civilian purposes. Many of the smaller mills whose machinery was not adapted for the manufacture of textiles required for Army and Navy uses had been forced to close their plants, and it was believed that in the near future the larger mills would find it necessary to curtail their production about 50 percent, since Government requirements were not sufficiently large to permit working their machinery at normal capacity.

Early in November, Judge Parker, the Priorities Commissioner, addressed a similar memorandum to the chiefs of other defense agencies asking for recommendations on extension of the curtailment program. Mr. Wooley of the War Trade Board strongly recommended asking for increased civilian economy, since he felt that was the only way to meet the unprecedented demand. Specifically he stated the need for greater conservation of wool and iron and steel. He thought that civilian purchases of woolen clothing should be curtailed and that the construction of new buildings should be prevented. "This is the moral responsibility of the American people."

Throughout the summer and fall of 1918, policy-making officials were bending every effort to make the curtailment program successful both as to its extension and as to method. Although reduction of unit output was first used, there were many who favored the rationing of the available raw materials as more equitable to the curtailed industries and more satisfactory from the Government's viewpoint. Such a system lent itself to a more direct control of the supplies of materials and required less administrative machinery.

The following excerpts from a memorandum of October 21, 1918, forwarded to the Chairman of the Priorities Board by the Executive Secretary of the Industrial Adjustment Commission show the trend of thought.

(1) This section in rationing industries will do so upon a basis of tonnage rather than of units, even though some industry circulars have been issued which are based on units. It will be necessary for each manufacturer to reduce his units to tons. It will not be necessary to develop more than the total tonnage of iron, steel, and other basic metals to which each manufacturer is entitled.

(2) In keeping account of transactions of various manufacturers we should obtain record of tonnage ordered, although this is not specifically covered by the circulars. In this connection we suggest the advisability of future circulars, including material "on order" in statement of what material is in stock, in transit, or stored. * * *

(4) Allotment includes material to be used on Government orders and, if an individual concern receives Government orders which call for more material than is called for in their allotment, this section should endeavor, other factors being

equal, to secure the replacing of this order among concerns that have available material. To accomplish this, it is advisable to take the matter up with Government purchasing departments to enable them to secure on the bids from industries which have been rationed a statement as to whether they have sufficient material under their allotment to provide for the particular order. This will avoid the possibility of reallocation. If satisfactory replacing of orders cannot be arranged because of prices, deliveries, or other reasons, a revision in amount of allotment can be made. We suggest that this should come as a definite request from the section before it is acted on by the Priorities Division. * * *

(8) * * * It seems advisable to emphasize the fact that material which a manufacturer may have on hand, if in excess of his allotment, is not available for use by him during the period referred to in the circular. There are some who will inadvertently misunderstand and some who will try to evade this ruling. The letter should make plain that if any evasion is disclosed, it will result in severe punishment.

(9) In many industries a great deal can be accomplished in trading raw and semifinished materials by one manufacturer with another, with important results in conservation. This section will take this up with the War Service Committee in each industry and ask them to take full charge of developing this idea with the manufacturer.

In July the War Industries Board found it expedient to reiterate its policy of discouraging new building ventures. A Senate inquiry made to the Treasury and to the Federal Reserve Board concerning the policy of limiting construction indicated the concern which would follow further restriction. Therefore the announcement of the War Industries Board early in September of a policy which meant the discontinuance of all private building enterprises, in order "to meet the demands for war materials from the United States military authorities and the Allies, * * * with a view to the conservation of building materials and to the release of labor to war work," was not wholly unexpected.

This program was so far reaching and so difficult to enforce that the State Councils of National Defense were for the first and only time called to the direct assistance of the War Industries Board. These councils were asked to investigate and report on all proposed new building projects. The board considered no applications for building materials until after the receipt of these reports which included sworn statements of the applicants. Final decisions were made in the newly established Non-War Construction Section of the War Industries Board.

A Priorities Circular, No. 21, was issued to all manufacturers, jobbers, distributors, dealers, and consumers of building materials setting forth in detail the extent of the restrictions and leaving no doubt of the breadth of its application. No non-war building construction costing more than \$500 and no extension costing more than \$2,500 would be considered. This ruling was so widespread in its effect that citizens who planned to construct new buildings and manufacturers and workmen in the various trades protested, and a

Senate investigation resulted. Mr. Baruch, the chairman of the Board, was called before the Senate. His statement was a complete résumé of the shortages with which the war program was confronted. It ended as follows:

It is not only the policy but the clear and simple duty of the War Industries Board to see that the war program of the country is met, and this program must be met now, when the needs are upon us. This duty must be fulfilled, even if its fulfillment entails industrial loss in this country as it does human loss abroad.

This ended the official protest, and the order stood unchanged until the close of the war.

Throughout this entire period there was a growing tendency toward approaching the problems of a defense economy in terms of a broad coordinated program rather than as a series of individual situations. Thus, at first the control was directed largely toward speeding the flow of particular commodities into the defense industries; later the distribution of the commodity was approached as a whole. The focus of control gradually shifted from the commodity to the industry and from producers of raw materials and intermediate goods to industries producing finished products both for defense and for civilian consumption. At the close of the war there was a clear trend toward broad comprehensive planning, considering each finished-goods industry in the light of its importance to the war effort and to the civilian population and, on the basis of such judgment, allocating to each such quantities of raw materials and fuel as seemed necessary and warranted.

SOURCE: This article is based upon the Official United States Bulletin for the period covered; reports and file material of the War Industries Board (now in the National Archives); Minutes of the Council of National Defense; American Industry in the War, by Bernard M. Baruch; Industrial America in the War, by Grosvenor Clarkson; and files of the New York Times, Commercial and Financial Chronical, and Iron Age.

INCREASING PRODUCTIVITY AND TECHNOLOGICAL IMPROVEMENTS IN DEFENSE INDUSTRIES¹

UNDER the impetus of the emergency, the production of defense materials, once a minor activity, today overshadows all other elements in our national economy. As the defense program gains momentum, large-scale production methods are being used in the manufacture of more and more defense items. The assembly-line technique of the automobile industry is being adapted to the production of planes and tanks. Design standardization and job simplification are being used to speed up production. Individual operations are being studied and machine tools improved and redesigned for special purposes; powered conveyors are being installed. In short, custom-production methods are giving way to mass-production methods.

Large-scale production, however, has not been the only factor tending to bring about better and more efficient use of our human and material resources in this emergency. The same ingenuity and engineering skill which have made possible a steady improvement in the American standard of living have been applied to the problem of defense production. In a number of instances, new and wholly original methods of doing a necessary job have been developed. At the same time, prospective shortages of critical materials have stimulated the fitting of new materials into new places in industry.

The progress of defense technology and the diffusion of new techniques will necessitate the reappraisal from time to time of the volume and nature of the employment opportunities created by the defense effort. It may be necessary to revise downward the early estimates of the labor requirements of specific parts of the production program. Concurrently, the steady lowering of skill requirements through technical improvements will provide a safety factor between worker-training programs and skilled-worker needs.

The primary object of this article is to present a brief sketch of the major technological developments which have thus far been observed in the defense industries and others related to them. This summary is by no means exhaustive; it is restricted to a few of the developments which are likely to gain wider acceptance.

Increased Use of Line Production

One of the important developments in defense technology is the adaptation of the powered conveyor—the distinguishing feature of the automobile industry—to the manufacture and assembly of

¹ Prepared by Lenore A. Epstein and Irving H. Siegel, in the Productivity and Technological Development Division, Duane Evans, chief.

military aircraft, engines, tanks, guns, shells, and other implements of war. This and other large-scale production methods have become practical only because of the unprecedented volume of the orders for defense.

The installation of a powered final assembly line, supplemented by other changes, is reported to have enabled the Vultee Aircraft plant at Downey, Calif., to cut "the final-assembly time on trainers by over 75 percent and the over-all time by 50 percent." The production schedule of the entire plant had to be regearred to meet the requirements of the mechanized line, which "consists of an overhead oval track, located at the head of the final assembly, from which dangle 25 cradles fed with raw fuselage frames. The frames move through 25 assembly stations, and at each one groups of three to six men fasten themselves, each in their interval, upon the skeletons, stringing control wires, bolting or screwing on fuel valves, cockpit enclosures, electrical systems, control columns, fire walls, instrument panels, and instruments. Forty hours later, when the frame is wheeled off the oval track, it is ready to become an airplane. On an overhead trolley, impelled by an electric button, the engines ride down, complete with exhaust stacks, cowlings, engine controls, oil tanks, 'plumbing'; and from the subassemblies and the paint shops, each at its proper moment, the *monocoques*, the *empennages*, the center sections, and the landing gears are pushed in on conveyers." ²

At North American Aviation, Inc., where bombers are produced, the use of improved subassembly and final-assembly techniques is reported to have reduced production man-hours on the B-25 by close to 25 percent.³ Within a few months after overhead conveyor systems, gravity-roll tracks, and ball bearings were introduced at the Santa Monica plant of the Douglas Aircraft Co., the production of bomber fuselages "trebled, while working space was increased only 30 percent and employment 70 percent."⁴

Mass-production methods at the Wright Aeronautical Corporation plant in Paterson, N. J., increased the output of aircraft engines "almost six times, while floor space has been expanded only about three and a half times, and manpower has been tripled."⁵ Prior to the spring of 1941, engines had been assembled in Wright's Plant No. 1 by the spot-assembly method: four men put every piece into one engine. It took a full 8-hour day to do this job. By decentralizing spot assembly into a coordinated group of operations, each group

² Fortune, September 1941 (p. 102): Vultee; Up from Nowhere. See also Aero Digest, July 1941: Powered Assembly Line Increases Vultee's Production; and Aviation June, 1941: Applying Machines to Quantity Production, by P. M. Jansen (for methods of the Curtiss-Wright Corp.), and Assembly Line Control, by O. L. Woodson (at Bell Aircraft Corp.).

³ Fortune, March 1941 (p. 103): The North American Way.

⁴ Steel, June 9, 1941 (p. 51): Bomber Output Trebled by Mass Production Line.

⁵ American Machinist, June 25, 1941 (pp. 595-605): Wright Turns to Line Production, by P. W. Brown.

requiring exactly 24 minutes, a rhythmical, perfectly timed progressive assembly line was developed that removed bottlenecks in engine output.⁶

JOB SIMPLIFICATION

There is every reason to expect that further advances in productivity will be recorded as mass-production methods become familiar to management and labor and as additional refinements are introduced. The consequence of the introduction of such methods is not, however, merely a reduction in the labor required per unit of output. It is perhaps even more important that the subdivision and simplification of operations permit the use of semiskilled and unskilled workers on precision jobs where formerly trained craftsmen would have been required. Job simplification has in some cases been carried to the point where the necessity for preemployment training is wholly avoided.

The Glenn L. Martin Co., for example, has been quite successful in simplifying its processes. "It was only a few months ago that Glenn L. Martin's employment office was demanding men of excellent backgrounds, of vocational or practical training. Today * * * green men are * * * taking up work on subassemblies that must be accurate to within a few thousandths of an inch."⁷ Similarly, in the production of Wright aeronautical engines, the work that one or two men customarily performed is now divided among a larger number of workers, each of whom performs a single operation. A new operator is rarely required to perform more than one operation and needs only a few weeks of training.⁸

With the break-down of production work into a large number of fairly simple operations, it has been found possible to use women in factory jobs where formerly men only were employed. At the Vultee Aircraft factory, women have been employed in increasing numbers since April 1941. It has been found possible in many cases to instruct these women on the job in from 2 to 8 hours. At present, women without previous experience in aircraft do not only burring and filing work on small aircraft parts but also a large share of the drill-press work. They are active in riveting, inspection, subassembly, and final assembly, as well as in the paint shop, trim shop, and on other types of work.⁹

The simplification of individual operations has been accompanied by the development of special devices to insure that workers with little or no previous experience will achieve precision results. At Wright's Paterson plant, for example, "each operator is provided

⁶ *American Machinist*, June 25, 1941 (pp. 595-605): *Wright Turns to Line Production*, by P. W. Brown.

⁷ *Aero Digest*, October 1941 (p. 192): *Progressive Assembly of Wright Engines*, by Kenneth Sutton.

⁸ *Aviation*, June 1941 (p. 52): *Simplified Production Process*.

⁹ *American Machinist*, October 29, 1941 (pp. 1106-1110): *Women at Work*, by R. A. Lawson; and *Aviation*, November 1941 (pp. 54, 55, and 182): *They Wear the Pants*, by W. Gerard Tuttle.

with a set of foolproof gages for checking the setting of his tools, as well as the accuracy of the finished piece. Efficiency of the training program, and of the tools employed; is proven by the fact that scrap losses are now only slightly over the lowest percentage obtained in 1938 and 1939, when practically every employee was experienced."⁸ Since there are literally hundreds of small holes of different size in many aircraft parts, aircraft manufacturers now paint the "jig bushing a distinguishing color for each drill size. A key giving the drill size and color is stamped at the end of the jig." This practice makes it unnecessary for the operator to determine the drill size by looking at the jig bushing and also eliminates the need for frequent time-consuming reference to the blueprint.⁹

Specialization of Tools

The mechanization of certain operations formerly performed by hand, the creation of many special-purpose machine tools, and the substitution of carbide cutting instruments for those of steel are other important developments of defense technology. Many of these improvements, moreover, are taking place concurrently with the introduction of mass-production methods.

Production time on the Allison supercharger entrance vanes was reduced by more than 50 percent as a result of a shift from hand-milling to automotive machining. Before the Cadillac Motor Car Division took a parts contract for the Allison Aircraft engine, the vanes were entirely hand-milled and shaped. Despite the intricacy of the processing steps, however, a special milling machine was finally developed that performed the necessary operations within thousandths of an inch.¹⁰

At the Wright Aeronautical plant, time per operation in the production of Nitralloy steel-cylinder barrel forgings was reduced approximately one-third through the installation of 10 six-station Bullard Mult-Au-Matics. The first six machines rough-bore and turn one end of the forgings, and take a facing out across that end; the other four rough-turn and face the other end of the barrel. Increasing production in the cylinder-head machining line is to a large extent attributable to the multiple-spindle Barnesdril machine, "which drills, reams, countersinks, spot-faces, and taps the spark-plug holes on each side of the casting in one set-up. Around the central column of the machine is arranged a 6-station fixture, which rotates to carry the cylinder from one work station to the next. The station at the

⁸ American Machinist, June 25, 1941 (pp. 595-605): Wright Turns to Line Production, by P. W. Brown.

⁹ American Machinist, July 23, 1941 (p. 695): Colored Jig Bushings.

¹⁰ Steel, June 23, 1941 (p. 58): Cadillac Halves Production Time of Aircraft Engine Entrance Vane.

front * * * is employed for loading and unloading the work * * * and each of the other stations has a vertical and an angular motor-driven spindle, so that the two holes are machined simultaneously at the five work stations around the central column." In the manufacture of the steel crankcase, a back-counterboring operation is performed automatically by a multiple-spindle machine on 20 holes at a time. "This job (of counterboring), particularly slow when done by ordinary methods, used to require 400 minutes; now the operator does the job easily in 65 minutes."⁸

In the production of 75-mm. shell, the forging operation was difficult because the life of the punches was short. At the Milwaukee works of the International Harvester Co., "by proper adjustment of the relative lengths of the punches and by proper technique in cooling, the life of the No. 5 punch has been increased from 1,000 or 2,000 up to more than 17,000 shell."¹¹

In the manufacture of machine guns, there have been great savings both in the number of operations required at various stages of manufacture and in total time requirements. Trunnion blocks and side-holding plates, formerly drilled separately and fitted together in assembly, are now drilled together to eliminate fitting operations. Traditionally, the air holes in the barrel jacket were elliptical, and three operations were required for each hole. With the substitution of circular holes, 10 could be drilled in one operation. The process has been speeded up further by punching instead of drilling. It is now planned to punch all holes at once in a flat sheet of steel and then roll the sheet into a tube. Machine-gun bores were once made with horizontal drills—a slow and laborious operation; now a special machine is used, drilling 6 barrels simultaneously, "with the force of gravity and oil under pressure assisting the vertical drills."¹² Finishing time on gun bores has been reduced to an eighth of former requirements by adoption of the new Micromatic honing technique.¹³

When the Garand automatic rifle was developed, "18 toolmakers spent 2 years completing 80 rifles. * * * Now, where 4 general-purpose machines took 11 minutes to drill, ream, countersink, and mill the rifle's trigger housing, 1 equipped with cutters that work from 6 different directions turns out the part in 58 seconds. * * * It used to take 4 minutes to produce a part of the rear sight. Now, one machine, performing 8 different operations and working on 6 parts simultaneously, completes a part every 27 seconds."¹⁴

Portable power tools, as well as stationary machine tools, are proving extremely useful in speeding production.

⁸ American Machinist, June 25, 1941 (pp. 595-605): Wright Turns to Line Production, by P. W. Brown.

¹¹ American Machinist, August 20, 1941 (p. 809): Standard Machines for Shell Production.

¹² Automobile Facts, May 1941 (p. 5): Never Saw One Before.

¹³ Free Press (Detroit, Mich.), August 13, 1941: Micromatic Hone Speeds Gun Output.

¹⁴ Automobile Facts, June 1941 (p. 5): Multiplying the Output.

A typical example is * * * the nut runner which permits tightening up a nut or bolt in places inaccessible to an ordinary wrench. Before this unit was developed, an operator had to make 15 to 20 strokes with a ratchet handle for each single turn of the nut or bolt in many instances. This took him from 1 to 1½ minutes per bolt. Using a portable power-driven nut runner with a right-angle head, the same operation is done easily in 1 to 1½ seconds—a speed increase of 60 to 1.¹⁵

The substitution of cemented carbide-tipped tools for metal tools also leads to greater efficiency, since the former do not require sharpening or replacement so frequently as the latter.¹⁶ In the manufacture of machine guns at the AC Spark Plug plant, "cemented-carbide tools are being utilized 100 percent for barrel turning, and experiments are under way with the hard cutting material for gun-barrel drilling, rifling, and eventually broaching." At \$4.50 each, carbide-tipped tools for roughing and finishing operations "are said to be cheaper than solid tools made from high-speed steel and the hourly output is four to five times greater than with steel tools."¹⁷

New Methods

In addition to improvements in machines and tools and the adoption of assembly-line techniques, there have also been many significant changes in basic processes or methods which have speeded the completion of war materials.

WELDING

The increasing substitution of electric welding for riveting, and also for gas welding, is one of the most striking illustrations of the basic changes being made. This substitution is occurring in aircraft production, in shipbuilding, in the production of machine tools, and in the fabrication of structural steel. Spot-welding, which is now progressing from an experimental stage to general acceptance, will eventually yield a tremendous saving in time and cost; in many instances it will also save material and reduce weight.

The use of electric-arc welding instead of gas welding for volume production of primary fuselage structures (pioneered by Vultee) is said to have resulted in a productivity gain of 25 percent.¹⁸ Though it is not yet possible to spot-weld a complete plane, batteries of 25 to 30 spot-welding machines, instead of 1 or 2, are now in use.¹⁹ "Authorities state that automatic machines will give 1,000 spot-welds on stainless steel in from 1 to 5 minutes at a total cost of only 5 or 10 cents. Other methods of joining (structural parts of aircraft) are reported to cost as much as 1,000 times this amount and to require a much longer time

¹⁵ Steel, April 14, 1941 (pp. 81, 82): New Handling Method Speeds Screwdriving.

¹⁶ Aero Digest, January 1941: Steel-Cutting Carbide Tipped Tools, by P. M. McKenna; and Automobile Facts, May 1941 (p. 5).

¹⁷ American Machinist, July 23, 1941 (pp. 704-705): From Motor Cars to Machine Guns.

¹⁸ Aviation, July 1941 (p. 44): Electric Arc Welding of Aircraft Structures, by Ralph Thorne.

¹⁹ Aero Digest, July 1941 (p. 190): Spotweldability of Aluminum Alloys, by C. L. Hibert.

to apply. Even hand spot-welding, which is necessary only on complicated work, need never be slower than 10 welds per minute—still much faster than other methods of joining. When it is considered that a bomber may require fastening as many as 250,000 points, it is obvious that spot-welding may save an important amount of time as well as money.”²⁰

In the construction of naval and merchant vessels, 25 percent less time is required if the structure is welded rather than riveted, according to the James F. Lincoln Arc Welding Foundation. That welding is speeding up construction is attested by records in many yards where ships are being completed months ahead of contract delivery dates.²¹ Moreover, according to a report of the welding research committee of the Engineering Foundation, there is a great saving of weight, “an increase of 1,000 tons in about 15,000 tons deadweight carrying capacity * * * as a result of welding. In addition to possible original savings in cost and increase in deadweight carrying capacity, * * * tests have shown that the completely welded shell, with elimination of laps, and consequent reduction of resistance, brings about appreciable fuel savings. Further economies are to be found in maintenance, amounting in some instances to 25 percent.”²²

In “tooling up” for production of mobile military field equipment, one large company estimates that arc-welding of jigs, dies, and fixtures reduced by 31 percent the time required by the method used previously; it also reduced the cost of jigs and fixtures 32 percent and the weight 17 percent.²³

Welding has also been found satisfactory for fabrication of structural steel and erection of buildings, although used but rarely for the latter purpose. After considerable experimental work, a welded design involving erection seats and clips has been worked out for building construction. “Comparison of the operations required in shop work with this method and with conventional methods reveals that the seat-and-clip method requires only 6 operations against 22 ordinarily involved. In field erection, this ratio is 7 to 12.”²⁴ In addition to time and material savings, a welded building has the advantage of stiffer construction which affords freedom from vibration. Moreover, by the application of welding, an existing building may be rendered capable of sustaining heavier loads than it was originally intended to bear; existing floors may be reinforced with steel beams so that they may support heavier machinery and columns may be reinforced even to sustain additional floors.²⁵ A Detroit company has

²⁰ Steel, June 23, 1941 (p. 79): Welding Stainless Steel, by W. D. Wilkinson, Jr.

²¹ Marine Engineering and Shipping Review, September 1941 (p. 71): Half-Million Tons of Steel Saved by Welding in 706-Ship Program.

²² Marine Engineering and Shipping Review, July 1941 (p. 94).

²³ Steel, May 12, 1941 (p. 56): Jig Cost Cut.

²⁴ Steel, June 9, 1941 (pp. 91-106): How to Save \$3 to \$5 per Ton in Erecting Structural Steel.

also found that the resistance forge welding process for fabrication of structural steel eliminates the necessity for "specially skilled" workers.²⁵

Figures released by the James F. Lincoln Arc Welding Foundation show that—

An average of 18 percent less steel is required to build the welded product or structure than the same one riveted. On this basis, production for national defense would have 360 pounds more usable material in every ton of steel. * * * The actual percentage of steel savings in the Foundation's 15 case examples, which were taken at random from industrial reports, range from 9 percent on a field service truck body and freight car underframe up to 45 percent on a scroll case for a turbine."²⁶

IMPROVED HEAT-TREATING METHODS

A new process has been developed for carburizing armor plate. According to the common method of carburization, as many as 50 hours may be required for a complete heat for ¼-inch plate; by the newer process, 3 heats may be carried out in 24 hours. Though this method of hardening has been used before, it was not until certain modifications were introduced recently that the depth of carbon penetration was sufficient so that the resulting armor plate met Government ballistic specifications.²⁷

A quick anneal process has been developed for the repair and reclamation of worn, broken, or obsolete die parts of high-carbon, high-chromium steel. By this method, a broken die "can be annealed and in the shaper or lathe in about 30 minutes and ready to harden a full day earlier than if processed by conventional methods."²⁸ The quick anneal process thus helps to maintain an uninterrupted flow of production and to counteract the shortage of machine tools.

IMPROVED INSPECTION METHODS

Critical inspection of aircraft parts is essential not only to preclude all possibility of structural failure of a plane but also to avoid time loss through the handling on the production line of defective parts. A speedy method of inspection by X-ray has been developed; it was first put into operation at Lockheed's Burbank plant, and has since been adopted by many other aircraft manufacturers. "Five years ago X-ray examination of class I and stressed parts was limited to 10 percent of the total used. In those days inspectors of machine shops were expected to detect flaws in the metal parts handled. Experience soon proved that 100 percent X-raying of class I and stressed parts actually saved time. * * * During the first stages of X-ray in

²⁵ Steel, April 26, 1941 (p. 60): Spotwelding Structural Steel Reduces Costs by 30 Percent.

²⁶ Marine Engineering and Shipping Review, July 1941 (p. 134): Sees Steel Shortage Curbed by Welding.

²⁷ Steel, March 31, 1941 (pp. 69 and 98): Light Armor Plate Heat-Treated by New Process in ¼ the Usual Time.

²⁸ Steel, June 9, 1941 (p. 80): A Quick Anneal for High-Carbon High-Chromium Die Steels, by B. L. Robinson and R. C. Pruitt.

metallurgical research, radiographing 100 parts a day was considered an achievement. The average was 30 or 40. Contrast this with the recently developed machine which X-rays 5,000 average parts per day. * * * We estimate that 10 of these new X-ray machines can handle the X-raying of all stressed parts that would be used in 50,000 planes a year. This extremely high production is made possible only by a continuous conveyor belt-feeding arrangement synchronized with automatic exposure controls." As a result of the accuracy of analysis made possible by the X-ray inspection method, manufacturers have been able to reduce the safety factor for castings from 100 percent to 50 percent, which means that lighter materials can be used. They have also been able to substitute castings for forgings in many instances, thus reducing further the number and weight of parts.²⁹

A technique has been developed for the quick determination of impurities present in metals in small percentages. Such a technique is especially desirable in view of the precision requirements of defense production. The newly developed instrument—the Recording Microphotometer, which combines a scanning unit and a recording unit—makes it possible to analyze metal samples "within the conventional tolerances of chemical methods, at least six times as fast as before."³⁰

POWDER METALLURGY

Powder metallurgy, though still in an experimental stage, promises to be of great significance because it allows savings in time, material, and manpower. In essence, the process consists in blending powdered metals, pressing them into briquettes in steel dies, and then baking the briquettes. The component metals never go through "most of the conventional steps taken by ores on their long route from mine to finished product." Powder metallurgy was first used in the manufacture of automobile bearings, as it allows impregnation of the bearings with lubricants. Recently the process has been used "to fabricate metal products formerly made by die-casting metals, now no longer available in quantities. * * * Applications of the process saved months in making retaining rings for ball bearings in antiaircraft guns and airplane-propeller parts."³¹

Since many metal parts made by means of the powder-metallurgy technique may be used immediately without lengthy machining, important savings in labor and machine time may be achieved as compared with the more usual casting methods. Still another advantage lies in the reduction of scrap loss. For example, in the case of a

²⁹ Steel, May 19, 1941 (pp. 68 and 103): X-Rays 5,000 Aircraft Parts Daily on One Compact Machine, by Tom Triplet.

³⁰ Steel, June 2, 1941 (pp. 69, 70): New Instrument Transforms Hours Into Minutes in Making Metal Analysis.

³¹ Automobile Facts, September 1941 (pp. 4, 5): Modern Magic.

machined brass part, the change to brass powder reduced the scrap loss from 73 percent to about one-half of 1 percent.³²

IMPROVED REPRODUCTION METHODS

Development by the Eastman Kodak Co. of a photographic material for sensitizing metal plates to be used as templates has resulted in great savings in time and in the simplification of many operations. In the Lockheed and Vega aircraft plants, duplicate templates, or work patterns, are produced by photographing the original drawing and projecting the negative on sensitized metal, which is then cut to size. Photo templates can be made as large as 4 feet by 12 feet, with tolerances of one-thousandth of an inch per foot. By reversing negatives, right- and left-hand parts may be reproduced from one drawing. "The time involved in making work patterns by this process is about a tenth or less the time required to produce hand-scribed templates." The process is important also because it reduces the demand for skilled draftsmen, of whom there is an actual shortage.³³

A photo-tracing process developed by Lockheed is proving almost as helpful as the photo-template process in increasing the tempo of production. This process consists, in effect, of photographing an assembly or the mock-up of an assembly and then adding the dimensions and other necessary items of information to the photo tracing. The whole may then be reproduced to any size desired by usual projection processes. This process has been found exceedingly helpful in making drawings of electrical and radio assemblies that are extremely difficult for a draftsman to illustrate. It has the additional advantage that the prints, which are called photodrawings, are generally easier for the novice to follow and understand than the conventional type of blueprint.³³

A technique of contact reproduction has been developed by the Republic Aviation Corporation on the ground that use of a camera and lens by men unskilled in the reproductive arts is not desirable. This process also allows right- and left-hand reproductions from a single drawing and reduces time and skill requirements.³⁴

METAL SPRAYING

Thus far, consideration has been given mainly to processes that have recently been introduced. Many other proved production methods are available which are not yet generally utilized in industry.

³² Steel, October 13, 1941 (pp. 128, 153): Advanced Techniques of Adapting Metal Powder to Industrial Use.

³³ Aero Digest, September 1941 (pp. 178, 181, 182): Using Camera as Aircraft Production Tool, by Joseph H. Washburn. See also Scientific American, August 1941 (p. 92): Transfer Film.

³⁴ Aviation, September 1941 (pp. 77, 172): New Reproduction Process at Republic, by Bruno M. Smiling and Ben Rudnick.

Metal spraying is one such process. "While for many years practically every large repair shop in the country has been using metal spraying successfully to resurface and restore to original dimensions cylindrical bearing surfaces of every description," there is "almost complete absence of any utilization of the process on original equipment."³⁵

PREFABRICATION

Still other well-known labor-saving methods are only now gaining currency under the impetus of the defense program. Prefabrication of structural parts, for example, is not new, but it is being more widely used than ever before to meet the need for new plant facilities and new housing for defense workers.

Prefabricated timber trusses were used for enlargement of the Beech Aircraft plant at Wichita. The larger trusses of 100- and 140-foot lengths were prefabricated at Portland, Oreg., while the smaller trusses were fabricated on the job. The frame structure was completed in 60 working days after receipt of the contract; in 90 days, 8 acres of plant extension were roofed over.³⁶ Likewise, when the Seattle-Tacoma Shipyard was prepared for operation after 16 years of inactivity, heavy prefabricated lumber units were used. Construction of the necessary buildings in 10 weeks, as well as great speed of assembly for the scaffolding layout of the shipways, was thus made possible. Incidentally, the design of the scaffolding provides for possible future dismantling.³⁷

The new Dallas plant of North American Aviation, Inc., which has one million square feet of factory space, was completed in 130 working days through use of prefabricated insulated structural units for walls and roof. The roof was laid at the rate of 1 acre a day; the walls were enclosed at the rate of one-third acre per day.³⁸

A new method for joining structural-steel sections of cantonment and other buildings has been patented. The "structural sections are connected by a specially developed interlocking system (a key and lock connection die-cut into the sections) which forms an extremely rigid, durable and easily assembled structure without use of bolts, rivets, welds, or other conventional connections." Speed of erection is an important advantage. "It is estimated that the steel frame for a building 23 x 30 feet in plan, single story, with gable roof, can be erected by 10 or 12 good workmen in from 45 to 60 minutes. * * * An entire building of this design can be erected complete in a few hours. Similarly it can be taken down in a short period and re-erected in another location, or the units can be changed around to form a different arrangement of rooms."³⁹

³⁵ Steel, April 14, 1941 (p. 52): Metal Spraying in Repetitive Production Work, by W. C. Reid.

³⁶ Construction Methods, June 1941 (pp. 64, 102): Long-Span Timber Trusses.

³⁷ Construction Methods, June 1941 (pp. 54, 55, 106, 107): Prefabricated Lumber Speeds Shipyard Building.

³⁸ Construction Methods, June 1941 (pp. 65, 117): 20-Acre Aircraft Plant.

³⁹ Steel, May 26, 1941 (p. 68): New Joining Method for Structural Sections.

Substitution of Materials

Even as the pressure for speed and the potential shortage of skilled workers have stimulated the development or adaptation of suitable production techniques, so the shortage of many metals has stimulated the development and use of new materials.

Newly developed plastics and wood-plastic alloys may release considerable tonnages of aluminum and certain other critical metals. Most plastics have the advantage of light weight and high resistance to chemical attack, including corrosion. Frequently a plastic part requires no applied finish. Plastics can be worked in some cases with even greater economy than metal parts. In the case of light aircraft, it is claimed that comparatively unskilled labor can be used extensively on the wood-plastic type of structure.⁴⁰

The possibilities of materials substitution are great in both defense industries and durable consumer-goods industries. An analysis of automobile requirements, for example, "showed 245 different parts now made of metal which apparently could be made equally well from molded plastics. Six hundred bomber parts were studied for possible replacement of metal by substitutes and 34 were found practicable for substitution, with an additional 82 recommended for further consideration."⁴¹

At the present time, "automotive ignition systems, including those used on cars, trucks, aircraft, and all automotive equipment (except Diesel types), require plastic parts. A great variety of plastic parts are needed for communication systems and other electrical applications important to the Army and Navy."⁴²

In certain automotive parts, such as pistons, ferrous metals are being substituted for aluminum; in other parts, such as axles and gears, alternative materials are being used for alloy steels.⁴³ Porcelain enamel on iron or steel may be widely substituted for aluminum and for stainless steel in the home appliance field, especially in refrigerator parts.⁴⁴

Plastics are displacing other materials in a number of aircraft parts. Transparent plastics, for example, are being used extensively in lieu of laminated glass in cockpits, and acrylates are replacing celluloid.⁴⁵ Plastic-bonded plywood is regarded as destined to play a major role in future aircraft design. Wood-plastic alloys, which are of especial importance in light planes, are expected to become important in heavier plane construction.⁴⁶ Combination wood-plastic propeller blades

⁴⁰ *Aero Digest*, September 1941 (p. 194): Plexweve CT-6A Trainer, by C. L. Bates.

⁴¹ *Nation's Business*, September 1941 (p. 50): The Substitute is "Batter Up," by H. E. Howe.

⁴² *American Machinist*, June 11, 1941 (pp. 527, 528): Can Plastics Replace Metals? by Herbert Chase.

⁴³ *Automotive Industries*, August 1941 (p. 35).

⁴⁴ *Steel*, April 14, 1941 (p. 40): How Porcelain Enameled Steel May Release Critical Defense Materials.

⁴⁵ *Aviation*, August 1941 (p. 200): Twenty-five Years of Progress in Materials, by J. B. Johnson.

are now being made, and reinforced plastics are being used for fuselage, wings, and tail units.⁴⁶

Opaque and transparent plastics are being used in place of metal and glass in the manufacture of gas masks.⁴² The use of plastics in shell noses, fuses, etc., is also expected. It is noteworthy that a plastic to be substituted for aluminum in shell manufacture is derived from the waste of sulphite paper mills.⁴⁷

In addition to the substitute materials now in use, experimentation on many others is in process. Development of a new nonmetallic material, "one-third lighter than aluminum and designed to replace that material in many important defense uses," has been announced by the U. S. Rubber Co. This material, known as Formula C-102, is made from fibrous and rubber-like ingredients of a nonstrategic nature. Under gunfire it resists ripping or shattering and it will not crystallize from vibration as do metallic substances. It is also free from corrosion and pinhole formation. The Goodyear Rubber Co. has developed a plastic by blending crude rubber with a rubber resin. Both materials may be used to replace aluminum panels now used in bus and truck body construction and in the production of such defense items as fuel tanks.⁴⁸ A flexible, semitransparent tubing of thermoplastic Saran has been developed by the Dow Chemical Co. as an alternative for copper and other metal tubing. The product is characterized by unusual toughness and resistance to moisture, brines, solvents, acids, and alkalis. It may be used for short periods at temperatures of 250° to 275° F., although its strength and resistance are somewhat reduced at high temperatures.⁴⁹

Outlook for Technology and Production

As the pressure for output of war implements increases, line-production techniques will find broader application, special-purpose machine tools will be designed for more operations, new processes will be developed, and fuller advantage taken of those not yet in general use. The chief importance of these developments does not reside at present in the reduction of total labor requirements they make possible, though this aspect may assume greater significance as defense production involves a still greater part of our national effort. The most immediate significance of these technological improvements is that they assist

⁴² American Machinist, June 11, 1941 (pp. 527,528): Can Plastics Replace Metals? by Herbert Chase.

⁴³ Aero Digest, September 1941 (p. 194): Plexweve CT-6A Trainer, by C. L. Bates, and Plastics in Aircraft, by J. E. Simonds. See also Aviation, May 1941: Molding Plastics, by Robert Dorat; Aero Digest, January 1941: Laminated Plastics for Aircraft Parts, by S. W. Place; and recent issues of Modern Plastics.

⁴⁷ Journal of Commerce (New York), June 15, 1941.

⁴⁸ Rubber Age, October 1941 (p. 41): Goodyear and U. S. Rubber Announce Defense Materials; and Wall Street Journal, September 3, 1941: U. S. Rubber Develops New Product.

⁴⁹ Journal of Commerce (New York), October 27, 1941: Flexible Tubing Developed by Dow.

in balancing an expanding defense production program against a limited supply of trained workers. Many of these changes permit the employment, after brief training periods, of inexperienced workers in jobs formerly requiring highly skilled workers. In other cases, such changes permit the same number of skilled craftsmen to produce far greater quantities of defense materials than before.

The situation with respect to materials is similar; the development of acceptable substitutes permits us to balance increasing needs against limited supplies. The development of such substitutes will assume even greater importance as expansion of the defense program forces more and more items onto the critical list. For example, the supply of spruce and other species used for plywood now appears to be sufficient, but any extensive development of the plastic-bonded airplane may require a large proportion of the phenolic and other resins, and thus affect the availability of molded plastics for other purposes. Furthermore, the materials used in making certain plastics are necessary in the manufacture of metal finishes which are essential for many defense goods. Although there is no present shortage of the raw materials for plastics, except formaldehyde, there are obstacles in the way of an immediate expansion of capacity. Some of the necessary chemical equipment requires the use of pure nickel or high-nickel alloys, and there is already a shortage of this metal. Moreover, the production of molds for plastics requires the services of skilled die makers, and these are already scarce.⁴²

The new production techniques developed under the stimulus of the defense program will leave a permanent imprint on our manufacturing economy. The aircraft industry, for example, having invested in and learned the practicability of large-scale production methods, will undoubtedly seek, in the post-war period, to create widespread demand for air transportation. As a "hedge against the peace," Vultee has "recently appropriated \$250,000 for the development of a four-or-five place private plane to be produced when the war ends."⁴³

By the end of the defense program, processes such as spot-welding will have become customary in both manufacturing and construction, permanently displacing older, more time-consuming techniques. Some of the special-purpose machine tools developed to meet the needs of large-scale defense production will be equally advantageous in civilian production. Others may be converted to nondefense uses. Companies which have made heavy capital investments in equipment for defense goods will have an especially strong motive to develop nondefense uses. Even now, many companies working to capacity on defense orders are engaged in active research looking to

⁴² *American Machinist*, June 11, 1941 (p. 527, 528-530): Can Plastics Replace Metals? by Herbert Chase.

⁴³ *Fortune*, September 1941 (p. 104): Vultee: Up from Nowhere.

post-emergency activity. At the Micromatic Hone Corporation of Detroit, for example, development work is under way on a process designed to eliminate the breaking-in period for automobile engines.¹³

The development during the defense period of superior manufacturing methods applicable to peacetime production embodies the promise that we may attain in the post-defense period a scale of living higher than ever before. But there is a threat with the promise—the same threat that is ever implied in technological advance. If we fail to achieve higher production levels, fewer man-hours of labor than before will be required in industry, and widespread unemployment or share-the-work efforts on an unprecedented scale will result. Thus, the various technological changes which today are contributing so effectively to our effort to preserve our way of life may tomorrow present us with a stern challenge.

¹³ Free Press (Detroit), August 13, 1941: Micromatic Hone Speeds Gun Output.

Wartime Policies

NATIONAL DEFENSE MIGRATION

THE first interim report of the Select Committee of the House of Representatives Investigating National Defense Migration¹ contains certain recommendations regarding migration as it affects the industrial-labor and the farm-labor markets, community-facility shortages in defense areas, contract distribution and extent of subcontracting, and post-defense problems. The report states that at a time like the present the hope of the Nation is centered in the mobility of its working population, which hope is in process of being realized. The investigations of the committee into the interstate migration of destitute citizens have brought out, however, the serious problems arising from mass migration. Viewing this migration in retrospect, the committee believes that many of the costliest penalties of a major migration such as the present one may be prevented if they can be foreseen in time, and the migration of millions of American families in search of employment during the decade 1930-40 offers certain lessons and points to certain preventives which will be applicable both to an emergency of wartime employment and to an emergency of peacetime unemployment.

Although there is no general labor shortage, the geographic and industrial distribution of contracts has made the distribution of job opportunities uneven, and workers have migrated to those industrial centers having the greatest volume of defense contracts. Much of the migration in search of defense jobs has been undirected, and testimony before the committee indicated that the total migration in response to defense jobs may be twice the actual number needed.

In order to meet this phase of the defense migration problem, a majority of the committee recommended the establishment of an employment service financed wholly by Federal funds and operated wholly by Federal personnel, as it was considered that the national scope of the defense labor market emphasizes the desirability of a service national in policy and control. As the committee found that there was discrimination in defense employment and training against many second- and third-generation Americans, against those of foreign birth,

¹ United States Congress. House of Representatives. Select Committee Investigating National Defense Migration (77th Cong. 1st sess.). First Interim Report. Washington, 1941.

and against Negroes, it recommended strict observance of the President's Executive Order 8802. That order directs among other things that special measures should be taken by all departments and agencies of the Government concerned with vocational and training programs for defense production to assure the administration of such programs without discrimination because of race, creed, color, or national origin, and that all defense contracts negotiated by contracting agencies of the Government should contain a provision obligating the contractor not to discriminate against any worker because of these reasons.

Migration and the Farm Labor Market

Although the expansion of industry under the national defense program has undoubtedly accelerated the migration of rural workers to the cities, there are few reliable statistical data on farm-labor shortages. Expert witnesses were unanimous in stating that there was no general farm-labor shortage, but it was the opinion of many that specific local farm-labor shortages existed in several defense areas. In spite of the withdrawals from the rural labor supply which have taken place, there is no evidence that these withdrawals have substantially reduced unemployment in agriculture. The committee found that such migration as there is of labor away from farms will be compensated in part, at least, by mechanization.

Since the committee considered that agriculture is no less vital to defense than industrial production, it recommended that the Farm Placement Service should be improved in line with the change recommended for the United States Employment Service, and that in connection with its normal placement operations, adequate and continuous data on farm-labor supply and demand should be collected. The committee also recommended the granting of the necessary funds to the Agricultural Marketing Service in the United States Department of Agriculture to improve its statistical reporting on farm wages and earnings and farm employment. In view of the careless and irresponsible advertising of alleged shortages by farm-labor committees, which has resulted in the past in oversupplies of agricultural labor leading to the stranding in many communities of large groups of destitute migratory laborers, it was recommended that all official reports of the farm-labor subcommittees of State land-use planning committees should be subject to review by the Department of Agriculture before release to the public.

Migration and Community Facility Shortages in Defense Centers

Acute shortages of housing, health, education, and recreation facilities have been created by the migration of hundreds of thousands of defense workers into defense centers. In many of the communities

affected there is not sufficient financial strength to meet and solve the community problems accompanying defense expansion.

To meet the situation created by the defense emergency in these communities, the committee believes that the immediate appropriation of additional Federal funds and the immediate construction of additional housing for defense workers are required. This recommendation was based on the findings that local communities are unable to cope with the situation, which is national in scope, and that private builders cannot build houses for the lower-income groups or even for the income group represented by as many as 80 percent of the defense workers. Because of the high rents demanded in many areas, the immediate enactment of legislation to curb rent rises was recommended. Immediate additional appropriations for defense community facilities such as school, health, and recreational facilities were also recommended.

Contract Distribution and Extent of Subcontracting

The location of contracts and the location of new plant facilities determine the direction of defense migration. In April 1941, the committee had found that contracts were greatly concentrated. Twenty major industrial centers, with 22 percent of the population of the country on December 31, 1940, had received 72.8 percent of all defense contracts. These data covered the period from June 1 to December 31, 1940. Similar contract data for the period June 13 to December 15, 1940, showed that 12 States containing 48.3 percent of the total population had received 85.1 percent of the total contracts. Some decentralization has taken place since that time, but the report states that it is evident that concentration remains the primary feature of contract distribution.

Subcontracting to small business would to some extent spread the defense production effort into the smaller towns and cities, and would tend to decentralize the present concentrated demand for labor, and in turn reduce the migration of labor for defense work. However, subcontracting has not always brought the small business man into the defense effort, as large prime contractors are in many cases subcontractors for other prime contractors. The extent of such subcontracting is not known, but it is not believed that small business is being drawn, in any significant way, into defense production.

In order to check the trend toward centralization, the majority of the committee recommended that greatly increased numbers of new plant facilities, both public and private, should be placed throughout the country, and Congress was urged to take whatever steps are necessary to bring this about. It was also recommended that subcontracting should be, to the maximum degree possible, an essential

part of all contract considerations. It was the opinion of the committee that enforcement of compulsory subcontracting to small firms should be applied—with the exception of those contracts in which the nature of the work does not permit of the practice.

Post-Defense Problems

To meet the problems of the transition period which will follow the close of the war, in which thousands of migrant workers will face unemployment through the closing down of the defense industries, the committee recommended that the Congress legislate a fourth category under the Social Security Act for general assistance on a grant-in-aid basis. These grants-in-aid for general assistance would be conditional on the abolition of State residence requirements for assistance. Four members of the committee favored the principle of variable grants, while the fifth member favored a matching basis for grants-in-aid. It was considered desirable that there should be local certification of need and local participation in the cost of the program.

The unanimous recommendation of the committee for the addition of this category to the act was based on the probability that hundreds of thousands of workers who have migrated to defense areas may find themselves unemployed and without settlement rights in the period following defense, so that they will not be entitled to public assistance. To return these workers to their respective States would be both costly and unfair and would impose a burden on their original areas of settlement which had not profited by the defense employment.



CANADIAN WARTIME SALARIES ORDER

IT WILL be recalled that Privy Council Order 8253, dated October 24, 1941,¹ stabilizing wages, provided that employers covered by that measure should pay a cost-of-living bonus to their employees "other than those above the rank of foreman or comparable ranks."

Privy Council Order 9298, of November 27, 1941,² makes similar provisions for stabilization of the salaries of officials above the rank of foreman, stipulating that with certain exceptions no employer shall raise the salary rate paid to such officials above the most recent rate of salary fixed and payable prior to November 7, 1941, and that "no employer shall pay bonuses, gratuities or shares of profits to a salaried official during any year following November 6, 1941, in a total amount in excess of the total amount of such bonuses, gratuities or shares of profits paid to the said salaried official during the 12 months ending

¹ See Monthly Labor Review, December 1941 (p. 1392).

² The Canada Gazette (Ottawa), Extra No. 96, December 1, 1941.

November 6, 1941, except where the salaried official has a contractual right which existed at November 6, 1941, to receive such a bonus, gratuity or share of profits defined as a fixed percentage of or in fixed ratio to his salary, the profits of the business, or the amount of sales, output or turn-over of the business, in which case the employer may continue to pay the said bonus, gratuity or share of profits at the same fixed percentage or ratio as that contracted for previous to November 7, 1941."

It is permitted, however, to increase the rate of salary—

if the employer establishes to the satisfaction of the Minister of National Revenue that the increase is commensurate with and is occasioned by a bona fide and reasonable promotion of a specific salaried official who has been given added responsibilities and increased duties, providing that the total salary including the increase is comparable with the level of salaries for comparable positions in similar businesses and provided that if the total salary, including the increase, is—

(a) less than \$7,500 per year, such increase is reported to and approved by the Minister of National Revenue on or before the assessment of the income tax return of the employer for the year in which the increase was made, or

(b) \$7,500 or over, such increase has been reported to and approved by the Minister of National Revenue before the payment of the increase.

It is further provided that an employer may, without the definite approval of the Minister of National Revenue, pay to officials who are in receipt of salaries under \$3,000 per annum a cost-of-living bonus not to exceed an amount of bonus based, in the manner set forth in this order, on the cost-of-living index for the Dominion as a whole as computed by the Dominion Bureau of Statistics.

The rise and fall of the cost-of-living index is to be measured in points to the nearest $\frac{1}{10}$ of 1 point after the index has been adjusted to the base of 100 for August 1939.

For each rise of one point in the index, the amount of the bonus or the increase in the amount of the bonus, as the case may be, and for each fall of one point in the index, the decrease in the amount of the bonus shall be:

(i) 25 cents per week for all adult male salaried officials and for all other salaried officials employed at salary rates of \$25 or more per week, and

(ii) 1 percent of their salary rate for male salaried officials under 21 years of age, and female salaried officials, employed at salaries of less than \$25 per week.

The amount of the bonus is subject to redetermination every 3 months in accordance with change in the cost of living on the basis specified in the order.

Any employer or his officer or agent who violates this order or who contravenes or fails to observe any of its provisions is liable "on summary conviction to a fine of not less than \$100 nor more than \$5,000, for each such violation, contravention, or failure."

EXTENSION OF CANADA'S FAIR-WAGES POLICY

AMENDMENT, effective October 15, 1941, of Canada's fair-wages policy makes the minimum-wage rates of the Dominion Government applicable to all persons employed by Government contractors instead of, as previously, to such of the contractors' employees as are actually engaged on work for the Government.

This fortifying and expansion of the Dominion wage policy are provided in order in council P. C. 7679, which abrogates order in council P. C. 3884 of a few months ago.¹

The new measure "provides that every employee of a Government contractor or subcontractor must receive the minimum wage rates established, as follows: 35 cents per hour for male workers aged 18 years or over; 25 cents per hour for female workers aged 18 years or over; and 20 cents per hour for male or female workers under 18 years of age."

Special rates of 20 to 35 cents an hour, after 12 weeks' employment are to be paid to male beginners; and of 20 to 25 cents an hour, after 4 weeks' employment, to female beginners.

No permits are necessary to hire beginners at these rates unless the quota of beginners is more than 20 percent of the total number of employees in any establishment. Under such circumstances special permits of employment must be secured from the Minister of Labor.

The specified minimum rates are not applicable to workers taking training courses under an approved apprenticeship scheme nor to handicapped workers hired by permit at substandard pay rates.

The order was passed after consultation with Provincial ministers of labor, and complaints as to violations are to be dealt with by the labor departments of the respective Provinces.

Contractors who fail to pay the prescribed minimum-wage rates are liable to heavy penalties.



PRICE REGULATIONS IN CANADA

ON NOVEMBER 24, 1941, price regulations were promulgated by the Canadian Wartime Prices and Trade Board for carrying out order in council P. C. 8527, effective December 1, 1941. This measure puts a ceiling to prices for new purchases of goods identical with those sold during the basic period—September 15 to October 11, 1941—and for goods of a kind and quality not sold during such period.² The four general principles underlying these regulations are as follows.³

1. New purchases of goods identical with those sold during the basic period must be sold to the consumer at not more than the highest price charged for such

¹ Data are from Canadian Labor Gazette (Ottawa), October 1941, p. 1180. For preceding order in council see Monthly Labor Review, August 1941.

² See Monthly Labor Review, December 1941 (p. 1392).

³ The Gazette (Montreal), November 25, 1941.

goods during the basic period, just as goods already on the shelves or on order must be sold at not more than basic-period prices.

2. Goods of a kind or quality not sold during the basic period but substantially similar to goods of a kind and quality sold during the basic period, must be sold at not more than the ceiling price for the latter goods. In case of doubt, the onus of proof is on the seller of the goods.

3. All retailers are expected to continue to sell merchandise in the same price ranges as has been their practice in the past. In buying new or seasonable goods, not substantially similar to goods sold during the basic period, retailers must have these established price ranges in mind.

No merchandise can be priced for sale at a price higher than would have been appropriate if such goods had been sold in the basic period, having regard to the retail price structure at that time and prices then actually charged for goods of the nearest similar classification and intrinsic value sold at that time.

4. Where the manufacturer's or wholesaler's asking price is too high to enable the retailer, who is bound by the above rules, to have his usual gross mark-up, the retailer, wholesaler, and manufacturer should arrange between themselves each to absorb a fair share of this higher cost, so that the price to the consumer will not be increased.

It is commented, regarding these four rules, that the Board "has established broad general terms, rather than rigid detail, leaving specific cases to be worked out in discussions between retailers and the administrators concerned."

Of the third rule quoted above, the Board said:

In case of doubt, the Board's administrators will, if necessary, determine the appropriate maximum price of any new kinds of merchandise. Whether such action is taken in the near future will depend on the views of each administrator and the extent to which sellers, in their pricing policies, follow the fundamental principles that consumer prices must not be raised and that prices prior to sale to the consumer should be adjusted as fairly as possible for all concerned.



BRITISH ESSENTIAL-WORK ORDER FOR RAILWAYS. 1941¹

FOLLOWING similar action for other important war industries, an essential-work order was promulgated for railway enterprises in Great Britain, effective on October 9, 1941. In applying the terms of the Essential Work (General Provisions) Order of 1941 to railroads, the principal order was amended slightly with respect to certain disciplinary provisions, as the terms of existing collective agreements made them unnecessary.

Once railroads or occupational groups in the industry are scheduled under the new order, the affected employees will be required to perform labor they can reasonably be expected to do, they will have regular employment at guaranteed wages, and they may not terminate their employment unless fixed obligations are complied with.²

¹ Report from Don C. Bliss, acting commercial attaché, London.

² See *Monthly Labor Review* for May 1941 (p. 1085) and November 1941 (p. 1160).

WITHDRAWAL OF YOUNG WOMEN FROM RETAIL TRADE IN GREAT BRITAIN ¹

TO INCREASE the supply of women for recruitment for vital war work, all women aged 20 to 25 inclusive in Great Britain are to be withdrawn from businesses wholly or mainly engaged in retail trade, except those in the food trades. Both employer and worker organizations agreed to cooperate in the withdrawal. A central advisory panel has been formed by employers and employees to assist in making the change, and the machinery established under the registration for employment order ² is to be utilized. Employers are to be consulted regarding each woman worker in the specified age groups. The women in the age groups affected who are running their own businesses are to have an opportunity to present their cases so that consideration may be given to personal hardship. They will appear before a women's panel of the local employment committee.

Employment exchanges of the Ministry of Labor and National Service are to have discretion in regulating the timetable under which women are released, where employers have an appreciable number of women of the ages affected and undue inconvenience might otherwise result. Regional panels and subcommittees of local employment committees will act as consultative bodies in each region. Membership is to be composed of equal numbers of representatives of employers and employees, with an independent chairman. The regional panels are to advise the central panels and the regional controller on the labor-supply position in the region. Local subcommittees are to advise on local labor-supply problems in retail trade and consider representations made by employers in retail trade to local offices regarding key workers.



CHANGE IN ATTENDANCE BONUS OF BRITISH COAL-MINE LABOR ³

DISTRICT coal-production committees in Great Britain are now responsible for dealing with persons in mines whose conduct may interfere with obtaining the maximum possible production of coal. This responsibility was placed on the committees under the terms of an order of September 4, 1941, relaxing the conditions for payment of the attendance bonus of 1s. per shift for adults and 6d. a shift for other mine workers. This increase in pay was provided after adoption of the essential-work order for the industry.⁴ Under the original agreement of June 1, receipt of the extra payment in any week was

¹ Great Britain, Ministry of Labor Gazette (London), October 1941 (p. 196).

² See Monthly Labor Review for May 1941 (pp. 1083, 1084).

³ Great Britain, Ministry of Labor Gazette (London), October 1941 (pp. 196, 197).

⁴ See Monthly Labor Review for August 1941 (pp. 369, 370).

contingent on the worker's being capable of and available for work throughout his normal working hours, except in cases of incapacity such as sickness.

The urgency of the present situation makes it necessary to secure the fullest possible output of coal. By dealing with individual cases of absenteeism as they may arise, it is anticipated that losses in working time will be minimized.



WELFARE WORK OUTSIDE BRITISH FACTORIES¹

A REPORT (Cmd. 6310) dealing with welfare work outside factories was recently issued by the British Minister of Labor and National Service. It covers the measures taken since June 1940 to develop welfare arrangements, such as the reception of transferred war workers, housing, food supplies, transportation to and from work, health, and recreation.

Housing and Transport

When a worker is transferred to war work away from home the employment exchange in the new location is responsible for his reception. Welfare officers carry out the general organization of the work, with the help of employers, voluntary organizations, and railway officials. For the first night or two, workers may remain in reception hostels, if available. For permanent accommodations they are referred to suitable lodgings or billets.

If lodgings must be found, the war workers are supplied with lists furnished by the local authorities to the local offices of the Ministry of Labor. If it is necessary, the workers are housed in billets that are acquired compulsorily under arrangements instituted by the Government's health department. Hostels are being erected near a number of factories. These and the reception hostels already mentioned are being managed by the National Service Hostels Corporation, a nonprofit body created in 1941.

Under normal conditions the transferred worker has breakfast and an evening meal in his lodgings and a midday or midnight meal in the factory canteen. Efforts are being made to insure provision of meals at workplaces by British restaurant services (i. e., the local authority's scheme for restaurants), if there are no factory canteens available and such services are needed. Under local schemes, shopping facilities are provided to enable married woman war workers, whose opportunities for shopping are limited, to buy a fair proportion of available unrationed foods.

¹ Great Britain, Ministry of Labor Gazette (London), October 1941 (p. 195).

Solutions of the complex problem of transporting workers to and from their work are considered by committees representing the various interested parties. Staggering the hours of different factories or of different sections in individual factories is used increasingly. Growth in the use of 3-shift operation has facilitated the planning of transport arrangements. When the report under review was issued, urgent attention was being given to transport problems in the winter of 1941-42.

Recreation and Health

With the existing restrictions on holidays and longer working hours, it is important that facilities for workers to make the best use of leisure time be provided. Special attention is being given to the problems of transferred workers on Sundays. The "fitness for service" scheme giving youths and men the opportunity for physical training and games is one measure. Under a Government grant of funds the scheme is being continued for men and extended to cover women.

Entertainments in factories arranged by the Entertainments National Service Association (created in July 1940) have been successful. Management has expressed its opinion that the effect on production has been favorable.

Special arrangements exist for the care of transferred workers when ill. The district nursing service is used, and where needed nursing cannot be supplied at the workers' lodgings or billets, arrangements are made for hospitalization under the Ministry of Health Emergency Scheme.

In some 90 districts the local authorities have been asked to arrange for opening day nurseries for children of women recruited for work of national importance. Owing to the impossibility of enlarging the day nurseries to accommodate all the children of such workers, a scheme for State registration of child minders has been introduced experimentally in some areas.

Older Workers

IMPROVED EMPLOYMENT SITUATION OF OLDER WORKERS¹

AS A RESULT of the depression of the thirties, the position of the older worker who lost his job often became acute. The sharp increase in the demand for labor under the national defense program has not solved all the problems of the older worker, but it has resulted in a very marked improvement in his general employment status.

The recent surveys by the Work Projects Administration show a very encouraging increase in the number of employed workers 55 years of age and over, and the placement statistics of the Federal Social Security Board also disclose the expanding job opportunities for men and women in the upper age brackets. The latter agency also reports a retardation in applications for old-age insurance benefits and the suspension of such benefits for a considerable number of persons temporarily returning to the ranks of labor. The age bars for applicants for United States civil-service examinations have been lifted, and legislation has been enacted permitting the War and Navy Departments to call back civil-service employees after they have been retired for age.

Other significant examples of improvement in the employment opportunities of older workers are also noted in this article.

WPA Estimates on Employment of Older Workers

In July 1941, the number of persons 55 years of age and over who were employed was 7,900,000—an increase of 800,000 as compared with the number employed in May 1940, according to recent surveys of the Work Projects Administration.

Table 1 gives the employment and unemployment estimates of the Division of Research of the Work Projects Administration for older workers for May 1940 and for May, June, and July 1941.²

¹ Prepared by Mary T. Waggaman, of the Bureau's Editorial and Research Division.

² United States. Work Projects Administration. Unpublished Memorandum on the Older Worker and Increasing Industrial Activity, August 21, 1941. Washington. (Preliminary figures.)

TABLE 1.—*Employment Status of Workers 55 Years of Age and Over, May 1940 and May-July 1941*

Status and age	Number of workers (in millions)			
	May 1940	1941		
		May	June	July
Employed:				
55-64 years of age.....	5.1	5.3	5.3	5.5
65 years and over.....	2.0	2.4	2.3	2.4
Total, 55 years and over.....	7.1	7.7	7.6	7.9
Unemployed:				
55-64 years of age.....	1.0	.8	.7	.7
65 years and over.....	.3	.2	.2	.2
Total, 55 years and over.....	1.3	1.0	.9	.9

The fact that the increase in employment among older workers was much greater than the decrease in unemployment suggests, according to the WPA, "that many persons 55 years of age and over who were nonworkers (e. g., those who were retired or who were pensioned) are returning to the labor market and obtaining jobs. The indications are that these persons have been called back to work in those industries and in those localities because their skills are now in great demand. In this way, the older worker who has built up a fund of experience in previous years, and who is skilled, is finding that work is again available to him. Those who do not possess a skill vital to the defense effort, i. e., those whose previous employment has been in the unskilled and semiskilled categories, still find that the emphasis continues to be on youth."

Placement Statistics of Social Security Board

Placements of older workers in the first half of 1941 were substantially above those in the first half of 1940. Over 304,000 placements, or 19.4 percent of all jobs filled by men during the first half of 1941, involved men 45 years of age or over. This constituted a gain of 65.1 percent over the placements of older men in the first 6 months of 1940.

Recent placement statistics supplied by the Federal Social Security Board are given in table 2, showing actual numbers by sex, age groups, and quarters, January 1939 to June 1941, and in table 3, containing indexes of placements for the same periods and groups.

There were approximately 60,000 more placements in the 45-54 age group and 28,354 more placements in the group 55 years of age and over in the April-June quarter of 1941 than in the corresponding quarter of 1940. Of the increase of placements, 41,354 in the first-mentioned age group and 21,778 in the latter group were of men.

TABLE 2.—*Placements of Men and Women, by Age Group, by Quarter, January 1939 to June 1941*

Year and quarter	Total	Under 21 years	21-44 years	45-54 years	55 years and over	Age unspecified
<i>Both sexes</i>						
1939: January-March.....	634, 380	72, 928	441, 126	84, 442	35, 583	301
April-June.....	947, 185	138, 317	636, 219	119, 374	53, 055	220
July-September.....	974, 444	169, 380	636, 866	116, 066	51, 895	237
October-December.....	920, 880	176, 006	593, 072	106, 135	45, 405	262
1940: January-March.....	667, 576	102, 139	453, 154	79, 614	32, 576	93
April-June.....	974, 008	163, 230	636, 695	119, 274	54, 237	572
July-September.....	991, 410	187, 078	635, 598	117, 562	51, 054	118
October-December.....	1, 149, 990	226, 738	730, 303	135, 561	57, 272	116
1941: January-March.....	1, 083, 806	181, 820	714, 549	130, 997	55, 375	1, 065
April-June.....	1, 414, 093	284, 153	865, 062	179, 206	82, 591	3, 081
<i>Men</i>						
1939: January-March.....	405, 142	31, 115	288, 068	59, 192	26, 535	232
April-June.....	637, 049	72, 432	438, 498	85, 147	40, 795	177
July-September.....	636, 497	88, 943	428, 552	79, 894	38, 943	165
October-December.....	546, 977	81, 167	363, 757	69, 213	32, 687	153
1940: January-March.....	354, 881	40, 511	246, 823	46, 396	21, 104	47
April-June.....	593, 577	82, 369	394, 262	77, 140	39, 535	271
July-September.....	605, 605	98, 622	396, 113	74, 570	36, 205	95
October-December.....	720, 874	119, 817	468, 171	90, 685	42, 101	100
1941: January-March.....	670, 010	99, 291	445, 610	85, 230	39, 037	842
April-June.....	895, 209	165, 662	547, 100	118, 494	61, 313	2, 640
<i>Women</i>						
1939: January-March.....	229, 238	41, 813	153, 058	25, 250	9, 048	69
April-June.....	310, 136	65, 885	197, 721	34, 227	12, 260	43
July-September.....	337, 947	80, 437	208, 314	36, 172	12, 952	72
October-December.....	373, 903	94, 839	229, 315	36, 922	12, 718	109
1940: January-March.....	312, 695	61, 628	206, 331	33, 218	11, 472	46
April-June.....	380, 431	80, 861	242, 433	42, 134	14, 702	301
July-September.....	385, 805	88, 456	239, 485	42, 992	14, 849	23
October-December.....	429, 116	106, 921	262, 132	44, 876	15, 171	16
1941: January-March.....	413, 796	82, 529	268, 939	45, 767	16, 338	223
April-June.....	518, 884	118, 491	317, 962	60, 712	21, 278	441

The placement index number of the 45-54 age group (both sexes) rose 56.3 points and that of the 55-and-over age group 61.0 points in the second quarter of 1941 as compared with the same period in 1940, whereas the placement index of the 21-44 age group was only 39.6 points higher in the April-June quarter of 1941 than in the corresponding quarter of 1940.

TABLE 3.—Indexes of Placements of Men and Women, by Age Group, by Quarter, January 1939–June 1941

[Quarterly average for 1939=100]

Year and quarter	Total	Under 21 years	21–44 years	45–54 years	55 years and over
<i>Both sexes</i>					
1939: January–March.....	73.0	52.4	76.5	79.3	76.5
April–June.....	109.0	99.4	110.3	112.1	114.1
July–September.....	112.1	121.7	110.4	109.0	111.6
October–December.....	105.9	126.5	102.8	99.6	97.7
1940: January–March.....	76.8	73.4	78.6	74.8	70.1
April–June.....	112.0	117.3	110.4	112.0	116.7
July–September.....	114.0	134.4	110.2	110.4	109.8
October–December.....	132.3	162.9	126.6	127.3	123.2
1941: January–March.....	124.7	130.6	123.9	123.0	119.1
April–June.....	162.7	204.2	150.0	168.3	177.7
<i>Men</i>					
1939: January–March.....	72.8	45.5	75.8	80.7	76.4
April–June.....	114.5	105.9	115.5	116.1	117.4
July–September.....	114.4	130.0	112.9	108.9	112.1
October–December.....	98.3	118.6	95.8	94.3	94.1
1940: January–March.....	63.8	59.2	65.0	63.2	60.7
April–June.....	106.7	120.4	103.8	105.2	113.8
July–September.....	108.8	144.2	104.3	101.6	104.2
October–December.....	129.6	175.1	123.3	123.6	121.2
1941: January–March.....	120.4	145.1	117.4	116.2	112.4
April–June.....	160.9	242.1	144.1	161.5	176.5
<i>Women</i>					
1939: January–March.....	73.3	59.1	77.6	76.2	77.0
April–June.....	99.1	93.1	100.3	103.3	104.4
July–September.....	108.0	113.7	105.7	109.1	110.3
October–December.....	119.5	134.1	116.3	111.4	108.3
1940: January–March.....	100.0	87.1	104.7	100.2	97.7
April–June.....	121.6	114.3	123.0	127.1	125.2
July–September.....	123.3	125.0	121.5	129.7	126.4
October–December.....	137.2	151.1	133.0	135.4	129.2
1941: January–March.....	132.3	116.7	136.4	138.1	139.1
April–June.....	165.9	167.5	161.3	183.2	181.2

Expanding Employment for Veterans

The June 1941 issue of the Employment Security Review reported that in April of this year 15,000 jobs were filled by veterans—an increase of about 26 percent over March.³

The veterans enrolled in the Civilian Conservation Corps on June 30, 1941, numbered 24,565, or 314 more than on the same date of the preceding fiscal year. The average age of a World War veteran is 48. However, the number of veterans in the Corps leaving for private jobs averaged 476 per month in the fiscal year 1941—an increase of 203 per month over the preceding year.

The number of veterans leaving the CCC for employment purposes varied somewhat from month to month in the fiscal year 1939–40, being 278 in the first month and 263 in the last month of that year. In 1940–41 the number rose steadily, from 201 in the first month to 781 in the last month. The total for the 12 months was 5,710.⁴

³ The preliminary figure on placements of veterans for October 1941 was approximately 18,000.

⁴ United States. Civilian Conservation Corps. Office of the Director. Memorandum for the press, (Washington), release date September 15, 1941.

Regional Reports on Labor-Market Developments

The regional reports on labor-market developments in the spring or the first half of the summer of 1941 issued by the United States Bureau of Employment Security, tell in a nonstatistical way the same story of the improving employment status of older workers. The following data are from these reports.⁵

New England.—Maximum age limits have been extended, especially for skilled employment. In shipbuilding, job specifications as to age have been relaxed. Sardine factories in Maine have retained older workers who formerly would have been dropped. Retail stores and construction employers have eased age specifications.

New York State.—Upper age limits are reported as no barrier to employment.

Middle Atlantic region.—Age limits for skilled workers are usually being waived and physical examination substituted. Age and experience requirements are being generally relaxed.

Great Lakes region.—In May and early in June 1941, age requirements were being adjusted to job demands. A little later, age requirements were "no longer a consideration."

Southeast and Gulf States.—Age limits continue to be most elastic. Employers are endeavoring to alleviate skilled-labor shortages in shipbuilding, machine-shop, textile, and garment occupations, by reducing age and experience requirements. However, in Florida some cases are reported of reductions in wages to discourage older men from taking jobs.

Southwest.—Employers have been lifting age barriers. Except for specifications concerning nationality and citizenship, ability is practically the only outstanding requirement for skilled jobs.

North Central States.—If a man is old but still active and has at some time worked at a particular trade, most concerns are willing to hire him. Age restrictions, especially for skilled jobs, have been eliminated.

Rocky Mountain region.—Employment of older workers is on the increase. Railroads in Utah have been hiring men up to 55 years without relaxing physical requirements; one Utah road reported that about 50 percent of the recently hired men were over 45—the previous maximum.

In Wyoming and Colorado railroads have also taken on older workers. In Denver a company preparing to operate an ordnance plant has been accepting men up to 55 years of age as supervisors,

⁵ United States. Social Security Board. Bureau of Employment Security. Labor Market Developments (Washington), issues of March, April, May, June, July, and August 1941.

and older men "with good training as machinists or experience in production-line work."

Pacific coast, Alaska, and Hawaii.—Age requirements have been radically revised. In the San Francisco Bay region an increased tendency is being shown to hire any available skilled workers and put them in any kind of jobs. In Washington State age limits are almost nonexistent in occupations in which there are labor shortages. Railroad companies in Nevada have raised their maximum hiring age to 55. Age limits have been considerably modified in Hawaii. At Honolulu retired workers with special skills, registered with the Employment Service, have been placed in their previous trades. For example, a man of 70 was employed as a machinist and a service engineer of 72 as a structural draftsman. Numerous veterans who went into different types of business in Honolulu after their discharge from the Army or Navy have obtained employment in which their previous skills have been utilized.

General.—In a general report on the labor market in the August 1941 Employment Security Review, it is stated that among the results of the dearth of skilled labor which threatens to hinder production is the gradual relaxation of employer standards as to age. This fact tends to induce those who have retired to go back to work. Retired shipbuilders in their sixties and seventies are returning to the shipyards and each of them is being utilized in connection with the training of new shipbuilding workers.

Return of Old-Age Insurance Beneficiaries to Ranks of Labor

Toward the close of 1940 the Bureau of Old-Age and Survivors' Insurance of the Federal Social Security Board was receiving reports concerning the return on the pay rolls of many who had declared their intention of becoming applicants for old-age benefits. Hundreds of retired workers were accepting offers of employers to go back to jobs requiring the experience and skill these older people possessed. Some of these workers were 70 years of age. Others have been asked to act as instructors in vocational training or in industrial establishments providing training for youthful workers.

Before the defense program was launched there had been a rapid rise in the number of claims submitted by workers who had reached 65—the earliest age for retirement benefits under the Social Security Act.

In the judgment of the officials of the Bureau of Old-Age and Survivors' Insurance and the Federal Social Security Board, the recent falling off in the number of claimants is largely due to the increase of employment and the desire of older workers to remain in industry.

According to the Federal Social Security Board, as of November 15, 1941, the old-age insurance benefits of more than 36,000 persons had been suspended because they had returned to remunerative jobs.

Opportunities in Public Service

LIFTING THE AGE BARS FOR CIVIL-SERVICE EXAMINATIONS

The demands for workers in many occupational groups are at present so imperative that the age provisions for United States civil-service examinations have been very much liberalized. It is now possible for especially well qualified older persons who are not on Government pay rolls to secure very desirable Federal positions.

An analysis of the announcements for examinations for positions in 1940 and 1941 including announcement No. 123, dated August 18, discloses large numbers of possible professional and supervisory openings for persons in the upper age brackets.⁶ As will be noted in table 4, the annual salaries run from \$1,200 for a departmental guard up to \$8,000 for an executive officer. The maximum ages fixed for applicants are from 55 to 70, the latter limit being for naval architects and marine engineers in the higher salary groups

TABLE 4.—*Maximum Age for Admission to Civil-Service Examinations for Specified Positions, 1940 and 1941*

[Last announcement included dated August 18, 1941]

Position	1941		1940	
	Salary per annum ¹	Maximum age ²	Salary per annum ¹	Maximum age ²
Accountant.....	\$3, 200	60		
Chief.....	5, 600	60		
Head.....	4, 600	60		
Principal.....	3, 800	60		
Senior.....	3, 500	60		
Associate.....	2, 900	60		
Assistant.....	2, 600	60		
Administrative officer.....	3, 800	60		
Chief.....	6, 500	60		
Principal.....	5, 600	60		
Senior.....	4, 600	60		
Agent, trade and industrial education:				
Regional.....	4, 600	60	\$4, 600	58
Special.....	3, 800	60	3, 800	58
Architect:				
Landscape:				
Principal.....	5, 600	60		
Senior.....	4, 600	60		
Naval.....	3, 800	70	3, 800	70
Principal.....	5, 600	70	5, 600	70
Senior.....	4, 600	70	4, 600	70
Associate.....	3, 200	60	3, 200	60
Assistant.....	2, 600	60	2, 600	60
Auditor, project.....	3, 200	60		
Chief.....	5, 600	60		
Head.....	4, 600	60		
Principal.....	3, 800	60		
Senior.....	3, 500	60		
Associate.....	2, 900	60		
Assistant.....	2, 600	60		

¹ Subject to a deduction of 3.5 percent toward a retirement annuity.

² Does not apply to persons granted preference for military or naval service, except that such applicants must not have reached retirement age.

⁶ Only positions having an age limit above 53 years are included.

TABLE 4.—Maximum Age for Admission to Civil-Service Examinations for Specified Positions, 1940 and 1941—Continued

Position	1941		1940	
	Salary per annum	Maximum age	Salary per annum	Maximum age
Automotive spare parts expert.....	\$3, 200	55		
Chemist, research (any specialized branch).....	3, 800	55		
Principal.....	5, 600	55		
Senior.....	4, 600	55		
Associate.....	3, 200	55		
Assistant.....	2, 600	55		
Construction inspector coordinator.....	3, 800	65	\$3, 800	60
Economist.....	3, 800	60		
Principal.....	5, 600	60		
Senior.....	4, 600	60		
Associate.....	3, 200	60		
Assistant.....	2, 600	60		
Editor, technical.....				
Associate.....	3, 200	55		
Assistant.....	2, 600	55		
Engineer.....	3, 800	60	3, 800	55
Principal.....	5, 600	60		
Senior.....	4, 600	60	4, 600	55
Associate.....	3, 200	60	3, 200	55
Assistant.....	2, 600	60	2, 600	55
Chemical.....	3, 800	55		
Principal.....	5, 600	55		
Senior.....	4, 600	55		
Associate.....	3, 200	55		
Assistant.....	2, 600	55		
Civil.....			3, 800	55
Senior.....			4, 600	55
Associate.....			3, 200	55
Assistant.....			2, 600	55
Explosives—Principal.....			5, 600	60
Marine.....	3, 800	70	3, 800	70
Principal.....	5, 600	70	5, 600	70
Senior.....	4, 600	70	4, 600	70
Associate.....	3, 200	60	3, 200	60
Assistant.....	2, 600	60	2, 600	60
Mechanical (industrial production).....			3, 800	60
Associate.....			3, 200	60
Assistant.....			2, 600	60
Metallurgical.....	3, 800	60	3, 800	60
Principal.....	5, 600	60	5, 600	60
Senior.....	4, 600	60	4, 600	60
Associate.....	3, 200	60	3, 200	60
Assistant.....			2, 600	60
Engineering aid (aeronautical).....			1, 800	55
Chief.....			2, 600	55
Principal.....			2, 300	55
Senior.....			2, 000	55
Assistant.....			1, 620	55
Engineering draftsman.....	1, 800	55	1, 800	55
Chief.....	2, 600	55	2, 600	55
Principal.....	2, 300	55	2, 300	55
Senior.....	2, 000	55	2, 000	55
Assistant.....	1, 620	55	1, 620	55
Engineering draftsman (aeronautical).....			1, 800	55
Chief.....			2, 600	55
Principal.....			2, 300	55
Senior.....			2, 000	55
Assistant.....			1, 620	55
Executive officer.....	8, 000	60		
Expediter (marine propelling and outfitting equipment).....	3, 200	65		
Furniture designer.....			3, 800	55
Guard, departmental.....			1, 200	55
Housing-management supervisor.....	3, 800	55		
Chief.....	6, 500	60		
Principal.....	5, 600	60		
Senior.....	4, 600	60		
Associate.....	3, 200	55		
Assistant.....	2, 600	55		
Illustrator (air-brush).....			2, 000	55
Senior.....			2, 300	55
Assistant.....			1, 800	55
Junior.....			1, 620	55
Industrial specialist.....	3, 800	60		
Principal.....	5, 600	60		
Senior.....	4, 600	60		
Associate.....	3, 200	60		
Assistant.....	2, 600	60		

TABLE 4.—Maximum Age for Admission to Civil-Service Examinations for Specified Positions, 1940 and 1941—Continued

Position	1941		1940	
	Salary per annum	Maximum age	Salary per annum	Maximum age
Inspector:				
Coal.....	\$3, 800	60		
Coal mine.....	3, 800	55		
Senior.....	4, 600	55		
Associate.....	3, 200	55		
Assistant.....	2, 600	55		
Clothing.....			\$2, 000	55
Junior.....			1, 620	55
Engineering materials.....	2, 300	65		
Senior.....	2, 600	65	2, 600	62
Associate.....	2, 000	65		
Assistant.....	1, 800	65		
Engineering materials (aeronautical).....	2, 300	65		
Senior.....	2, 600	65		
Associate.....	2, 000	65		
Assistant.....	1, 800	65		
Junior.....	1, 620	65		
Hats.....			2, 000	55
Materials:				
Associate.....			3, 200	55
Assistant.....			2, 600	55
Miscellaneous supplies.....			1, 800-2, 000	55
Leather.....				65
Miscellaneous supplies (hosiery and knit underwear).....			2, 000	55
Naval ordnance materials.....	2, 300	65		
Senior.....	2, 600	65		
Associate.....	2, 000	65		
Assistant.....	1, 800	65		
Junior.....	1, 620	65		
Ordnance material.....			2, 300	55
Senior.....			2, 600	55
Associate.....			2, 000	55
Plant protection.....	3, 200	55		
Principal.....	4, 600	55		
Senior.....	3, 800	55		
Assistant.....	2, 900	55		
Powder and explosives.....			2, 300	55
Senior.....			2, 600	55
Associate.....			2, 000	55
Assistant.....			1, 800	55
Junior.....			1, 620	55
Procurement.....	2, 300	62		
Senior.....	2, 600	62		
Ship construction.....	2, 300	65	2, 000	62
Senior.....	2, 600	65	2, 600	62
Associate.....	2, 000	65		
Shipyard:				
Electrical.....	3, 200	65		
Senior.....	3, 500	65		
Associate.....	2, 900	65		
Assistant.....	2, 600	65		
Hull.....	3, 200	65		
Principal.....	3, 800	65		
Senior.....	3, 500	65		
Associate.....	2, 900	65		
Assistant.....	2, 600	65		
Junior.....	2, 300	65		
Hull outfitting.....	3, 200	65		
Joiner.....	3, 200	65		
Senior.....	3, 500	65		
Associate.....	2, 900	65		
Assistant.....	2, 600	65		
Machinery.....	3, 200	65		
Principal.....	3, 800	65		
Senior.....	3, 500	65		
Associate.....	2, 900	65		
Assistant.....	2, 600	65		
Junior.....	2, 300	65		
Signal corps equipment.....			2, 600	55
Senior.....			3, 200	55
Junior.....			2, 000	55
Subsistence supplies.....	2, 000	55		
Principal.....	2, 600	55		
Senior.....	2, 300	55		
Assistant.....	1, 800	55		
Junior.....	1, 620	55		

TABLE 4.—Maximum Age for Admission to Civil-Service Examinations for Specified Positions, 1940 and 1941—Continued

Position	1941		1940	
	Salary per annum	Maximum age	Salary per annum	Maximum age
Inspector—Continued.				
Textiles.....			\$2,000	55
Junior.....			1,620	55
Welding.....			2,600	55
Libraries, director.....			5,600	58
Assistant.....			3,800	58
Medical officer—Chief.....			6,500	55
Metallurgist.....	\$3,800	60	3,800	60
Principal.....	5,600	60	5,600	60
Senior.....	4,600	60	4,600	60
Associate.....	3,200	60	3,200	60
Assistant.....			2,600	60
Motor-transport service manager.....			2,600	55
Photographer, head.....	2,600	60		
Senior.....	2,000	60		
Assistant.....	1,620	60		
Under.....	1,260	60		
Physicist (any specialized branch).....			3,800	55
Principal.....			5,600	55
Senior.....			4,600	55
Associate.....			3,200	55
Assistant.....			2,600	55
Radio monitoring officer.....			3,200	55
Assistant.....			2,600	55
Radio operator.....			1,620-1,800	55
Soil scientist—Head.....	6,500	55		
Superintendent:				
Building maintenance.....	3,200	55		
Senior.....	3,800	55		
Junior.....	2,600	55		
Clothing factory:				
Class A.....			3,800	55
Class B.....			3,200	55
Class C.....			2,600	55
Construction.....	3,800	58		
Principal.....	5,600	58		
Senior.....	4,600	58		
Associate.....	3,200	58		
Surveyor, marine.....			3,200	60
Tailor, foreman:				
Class A.....			2,300	55
Class B.....			2,000	55
Class C.....			1,860	55
Technician, radiosonde—Senior.....			2,000	60
Technologist (any specialized branch).....	3,800	55		
Principal.....	5,600	55		
Senior.....	4,600	55		
Associate.....	3,200	55		
Assistant.....	2,600	55		
Technologist, cotton—Senior.....			4,600	60
Training specialist:				
Principal.....	5,600	58		
Senior.....	4,600	58		

The United States Civil Service Commission's consolidated list of workers needed for national defense, dated September 17, 1941, should tend to encourage older workers because of the numerous examinations announced for jobs in various parts of the country in the skilled trades, which are open to qualified applicants up to 55, 62, and 65 years of age, the prevailing age limit for these older workers being 62. The compensation for these positions ranges from 66 cents to \$1.08 cents per hour; from \$3.68 to \$9.04 per day; and from \$1,680 to \$2,600 per annum.

EXTENSION OF AGE LIMITS IN WAR AND NAVY DEPARTMENTS

Under date of April 25, 1941, a circular letter was sent out by the United States Civil Service Commission to its district managers, stating that it had approved the request of the War Department to extend the maximum age limit of applicants to 65 years "in open continuous examinations for any positions in schedule E of the Ordnance Regulations in which difficulty is experienced in recruiting eligibles within existing age limitations."⁷

Reemployment of retired employees.—Section 6 of the National Defense Act, approved June 28, 1940 (Public No. 671, 76th Congress) provides that—

Any person heretofore or hereafter retired under the Civil Service Retirement Act of May 29, 1930, as amended, may be reemployed in the War and Navy Departments: *Provided*, That there shall be deducted and withheld from the basic salary, pay, or compensation of such person and credited to his account as provided in section 12 (a) of the act of May 29, 1930, as amended, the regular deductions prescribed by the said act: * * * *Provided further*, That payment of the annuity of such person shall be suspended during the period of such employment.⁸

⁷ For previous article on "Hiring of older workers by War and Navy Departments," see Monthly Labor Review, September 1940 (p. 622).

⁸ United States War Department. Civilian Personnel Division. Memorandum No. 7, Washington, July 10, 1940.

Young Workers

PROMOTION OF OPPORTUNITIES FOR YOUNG PEOPLE IN MASSACHUSETTS

THE Governor of Massachusetts on October 10, 1941, approved a legislative measure (ch. 646) establishing a board for the promotion of opportunities for young people. The act declared the purpose of the board to be that "of coordinating the activities of the State government, industry, the schools, labor, and public and private social agencies, insofar as they relate to educational and employment problems of the youth of the Commonwealth." The personnel of the board will consist of the commissioners of education, labor and industries, correction, public welfare, and five citizens of the State. Three of the latter group must be selected in accordance with their qualifications as (1) an employee, (2) an employer, (3) a member with practical experience in youth guidance and training.

The new act directs the board to cooperate with all Federal and State agencies concerned with the education, training, and guidance of youth. Cooperation must also be extended to all organizations of employers and employees in the State, to school committees, and to all public and private agencies engaged in assisting and counseling youth. By the terms of the act the board will cease to function on December 1, 1947.

MICHIGAN FARM-APPRENTICE PLAN

APPRENTICESHIP training in agriculture has been organized under a State program sponsored by the Michigan Board of Control for Vocational Education.¹ An agricultural apprentice is defined as "a young person 16 years of age or older who enters into a written agreement approved by his employer, parent, and the local school authorities, covering the terms of his training."

Under this agreement the young person's employment is provided for in an approved farming program which must include a minimum of 100 hours of related instruction in the vocational agriculture department of a high school, over a period of at least 2 years' full-time

¹ United States Office of Education. *School Life* (Washington), November 1941 (p. 57).

or 3 years' half-time farming. In fact, the contract calls for a supervised farm-practice program, as arranged for under the Smith-Hughes Act, on an apprenticeship basis.

According to the supervisor of publications for the Michigan State Board of Control for Vocational Education, eligibility for agricultural apprenticeship includes physical fitness, social adaptation to farming, and 3 months' probationary service. The majority of the agricultural apprentices in Michigan are boys who have left full-time school. They may go on with their regular instruction in high school on a part-time plan, if they so desire.

Instruction is given at group meetings, the local teacher of vocational agriculture usually being responsible for the supervision and teaching work and for the coordination of the apprenticeship program. Each apprentice is provided with a record book, in which the different types of farm work he carries on month by month are entered. This record is valuable to him in securing placement after he has finished his training program. The apprentice is awarded a diploma upon completion of his apprenticeship, which indicates the length of time he spent in the apprenticeship program and the proficiency he attained.

No set apprentice wage is stipulated under the Michigan plan, but it is assumed that the compensation will include board, lodging, washing, mending, and some cash remuneration.

The establishment of the local school system's course is the responsibility of the local superintendent of schools, who also is responsible for making a survey to discover opportunities in farming and related occupations in agriculture for youth who become apprentices.

This agricultural apprenticeship scheme provides also for the organization of a local advisory committee, whose members are the local superintendent of schools or principal, the apprenticeship-program instructor, the county agricultural agents, the agent of the 4-H Club, and one or more successful farmers, to aid in selecting and placing the applicants for apprenticeship and in meeting other problems connected with the plan.

Each of the (Hillsdale, Mich.) apprentices were instructed in the high-school farm, in management, farm marketing, farm credit, accounting, sanitation, approved methods in dairying, poultry and egg production, soil tests and management, fertilizers, and sheep care. All of the boys reported, upon graduation from apprenticeship, that they were already tenant farmers and were looking forward to becoming farm owners. Referring recently to the agricultural apprenticeship plan, the director of the Michigan Board of Control for Vocational Education said:

"This program offers an opportunity to the youth who desires to make farming his work. Through apprenticeship training young persons may secure actual farming experience as well as technical knowledge. The farm provides the work experience, the school the related technical knowledge. Youth who spend 2 or 3 years as

agricultural apprentices are adequately prepared for their occupational life without the loss of time, effort, and expense incident to adjustment in farming without previous training."



NEW CHILD-LABOR LAW OF BRAZIL

CHILD labor in Brazil, regulated for the first time on a national basis by the Children's Code of 1927 and later in greater detail in 1932, is the subject of a law of September 13, 1941, which amends and coordinates the previously enacted measures.¹

A minimum age of 14 years, first introduced in 1927, for industrial employment, is now extended to practically all employment except domestic service and work in shops employing only members of one family under the direction of one of them. Farm work, usually excluded from the application of child-labor laws, is covered by the present law insofar as it requires a technique of an industrial nature. Subsequent regulations are to determine whether or not the law is to apply to other kinds of farm work.

Exemptions from the legal minimum age because of poverty (which was permitted by the Code of 1927) apparently cannot take place under the present law.

The limitation of work to 8 hours a day and prohibition of employment of persons under 18 at night, with some exceptions, and in harmful or dangerous occupations, both found in previous laws, are left intact. Some additions have been made, however, to the conditions for admission to employment: proof of age, permission from the parents, a physician's certificate, and proof of knowledge of reading, writing, and counting are required as under the law of 1932; but now a photograph, a statement from the employer as to the kind of work assigned to the young person, and an employment certificate or work-book are also required. An important innovation is the requirement of a permit from the judge of the juvenile court for young persons between 14 and 18 years of age intending to engage in street trades. The judge is to ascertain whether the young person needs the work for maintaining himself or his parents or other specified relatives and whether the work is likely to be harmful to his moral development. The employers of persons under 18 years of age must give them necessary time off to attend school. Annual reports must be sent in a prescribed form to the Ministry of Labor, Industry, and Commerce. Penalties are ordered for violations. The law, which goes into effect in January 1942, is to be enforced in the Federal District by the Bureau of Labor; elsewhere by the regional offices of the Ministry of Labor, Industry, and Commerce, or by specially designated officials.

¹ *Diário Oficial* (Rio de Janeiro), September 16, 1941 (p. 17931).

Population Problems

COMPOSITION AND ASSIMILATION OF FOREIGN POPULATION OF THE UNITED STATES

THE general rise in the volume of employment as a result of defense activities has not benefited the aliens included in the population of the United States as it has the citizens. At the time of the national registration of aliens in 1940, there were somewhat fewer than 5,000,000 aliens, or about 4½ percent of the population. Because of increasing discrimination, aliens "are finding it more and more difficult to get work, despite the catapulting needs of defense industries," according to Marshall E. Dimock, Associate Commissioner of the U. S. Immigration and Naturalization Service, who reported on this situation to the annual Conference of Social Work at Atlantic City, June 2, 1941. In the address from which the following data are taken, Mr. Dimock asks:

What are such people to do? Most of them could not return to their native lands even if they would. Added to the economic insecurity which affects a growing number of them is another fear, the uncertainty in this insane world regarding what government will do to them, even in a country as fair and tolerant as our own. Leaving aside the humanitarian aspect of the matter and looking at it solely from a hard-headed standpoint, it is clear that those two fears, economic and governmental, cannot help but have a dampening effect upon the unity and devotion which our republic requires in the troublous days ahead.

In his judgment, aliens who have come to the United States because they admire the institutions of this country and desire to "build themselves into it," and whose loyalty and sympathy are indubitable, should be given the assurance that they can help our defense efforts.

This is a hard-headed viewpoint, because, irrespective of what one may think of the past liberality of our immigration policies, the plain truth of the matter is that most of the five million are here legally and inferentially at our own invitation. To alienate an entire group, therefore, because of disapproval of past policy is to assume a serious burden of responsibility, so indispensable is the unity of all elements at the present time.

No quarter, of course, will be allowed that small minority of aliens who seek to undermine and overthrow our institutions. We will try to show them that when it comes to legal measures of suppression our democracy can "crack down" as efficiently as those who would enslave us. For the great majority of the foreign-born, however, this government has no other conceivable purpose than fairness equal to that which is shown to our own citizens.

As a consequence of alien registration, this country is in a much better position than formerly to deal with its alien population. For example, the Government now knows that the 4,742,000 aliens in its borders are 1,250,000 fewer than a decade ago; that a third of the registrants have taken steps toward naturalization; and that over a quarter of a million of them will file declarations in the current year.

Of the 10 States having the highest proportions of aliens, New York leads with 25 percent, followed by California with 11 percent, Pennsylvania and Massachusetts with 7 percent each, and Illinois, Michigan, New Jersey, Texas, Ohio, and Connecticut, with percentages running from 3 to 6. The record of the next 5 States is from 1 to 2 percent, while the remaining 33 States have less than 1 percent each.

Characteristics of Alien Population

As the foreign population is mainly urban and industrial, the present-day problems of the alien, which have been intensified by the war, are found in industrial centers. As a result, these foreigners suffer especially from legal and nonlegal discriminations which bar them from employment. The actual number of workers affected by Federal and State restrictions is relatively small in comparison with the number whom employers will not hire simply because they do not care to take foreigners on their pay rolls. Furthermore, the median age of the alien group is 48 years, while that of the population as a whole is only 28 years. This adds to the breadwinning and social-adjustment difficulties of the urban foreign group.

The illiteracy of the alien portion of the population is appalling. A sample from the alien registration forms discloses that about 15 percent of the aliens signed their registration blanks by using "his mark" or "X," and the actual proportion of those unable to pass a more comprehensive literacy test than this would be materially higher. Nine-tenths of the illiterate alien population is in the over-45 age group. Unless the literacy requirements for aliens over 50 years of age are relaxed, thousands will never be able to become citizens.

Of the total alien population, Italy has the heaviest representation—660,000; Canada ranks next with 450,000; the figure for Poland is 430,000 and Germany and England (excluding Ireland) have approximately 360,000 each.

About 2,600,000 registrants have never applied for first papers. About 57 percent of the Italian registrants and about the same proportion of the Canadian registrants are in this group, as well as 53 percent of the Polish, 52 percent of the English, and 40 percent of the German registrants.

Comparing 1906–24 and 1924–38, the percentage of English non-applicants is approximately 40 percent for the two periods. The German proportion of nonapplicants, however, was more than doubled in the later period, rising from 20 to 50 percent.

Movement of Aliens

In the fiscal year 1940-41, 18,000 deportation proceedings were handled. The border guard of the United States Immigration and Naturalization Service was increased, visas were required of all entrants, and seaman regulations were tightened up.

In the fiscal year 1939-40 only 70,000 immigrant aliens were admitted, out of an allowable 153,000; the nonimmigrant aliens admitted numbered 138,000, and an even larger number of nonemigrant aliens—144,000—left the United States. According to Mr. Dimock, "these are all indications that matters are well in hand, once the backlog of deportables has been taken care of."

**MEASURES TO INCREASE BIRTH RATE IN GERMANY**

THE State Secretary of the German Finance Ministry has recently revealed certain figures concerning the expenditures which Germany has made, since the beginning of the National Socialist regime, in the interests of an increased birth rate.¹ Since August 1933 there have been 1,800,000 marriage loans; since October 1935, 1,100,000 subsidies to families already having three or more children, for the birth of another child; since April 1938, 400,000 educational subsidies; and since October 1938, 180,000 equipment subsidies to peasants. Furthermore, since August 1936 regular monthly subsidies for children have been made, which are received at present by 2,500,000 families for 5,000,000 children. Expenditures for all of these subsidies have increased steadily. Three billion marks² have been paid in subsidies to date, and beginning with the present fiscal year they are expected to total 1 billion marks annually. Greater allowances for children in the tax schedules have also been made, in order to encourage a higher birth rate.

The number of marriages in Germany proper increased from 517,000 in 1932 to 772,000 in 1935, whereas in Austria they increased from 49,000 in 1937 to 121,000 in 1939. In Germany, 1,407,000 living children (or 20.3 per thousand families) were born in 1939, as compared with 971,000 (or 14.7 per thousand) in 1933.

¹ Deutsche Steuer-Zeitung, September 13, 1941.

² Average exchange rate of mark in June 1941 = 40 cents.

Industrial Relations

LEGISLATION ON LABOR RELATIONS, 1941

LEGISLATIVE sessions were held in 43 States during 1941. In nearly all of these States bills were introduced affecting the relationship of employer and employee. In some instances new laws affecting labor relations were adopted, while in other cases amendatory legislation either restricting or expanding the rights of labor received positive action by the respective legislatures.

In the field of collective bargaining, a new labor relations act was passed in Rhode Island, while in Minnesota several changes were made in the original State labor relations act. New Jersey adopted an anti-injunction act modeled after the Federal Norris-LaGuardia Act. Several States enacted new or amendatory legislation concerning the mediation of labor disputes. Of particular importance in this field was the establishment of new mediation agencies in New Jersey and North Carolina.

In a number of States restrictive labor legislation was adopted. A drastic antipicketing law was enacted in Texas, while in Georgia a new law requires that 30 days' written notice must be given before engaging in a strike. Maryland adopted a law against sit-down strikes. California adopted a measure to outlaw secondary boycotts and organized refusals to handle so-called "hot cargo" goods produced in a strike-bound plant; however, this law has been suspended pending the results of a popular referendum. Numerous States adopted sabotage-prevention acts. In general, labor has opposed these laws on the ground that they may be used as a means of preventing strikes and picketing. Particularly objectionable to labor are the provisions in most of the laws that permit local authorities to restrict the use of highways abutting plants. In several jurisdictions the legislatures, following provisions of the Selective Service Act, adopted legislation for the reinstatement of draftees after their release from military service.

Collective Bargaining

The new Labor Relations Act of Rhode Island (ch. 1066) is modeled after the National Labor Relations Act, and is similar in many respects to the five original so-called "Little Wagner Acts" adopted

in 1937.¹ In 1939 two of these laws² were amended so as to forbid specified unfair labor practices of employees as well as employers. The Rhode Island law does not deal with unfair labor practices of employees, but it does declare that the employees' right of self-organization shall be free from coercion from any source.

The Rhode Island law is to be administered by a board of three members, consisting of representatives of employers, employees, and the public. Although the law is based generally on the Wagner Act, it goes into greater detail, and many rulings of the National Labor Relations Board appear to have been incorporated into the law. Thus, company unions are defined in detail; and in the matter of representation, if the board determines that an organization is a company union, its name will not be placed on an election ballot. Likewise, strikebreakers are not permitted to participate in an election. The State board is authorized to determine the bargaining unit in a representation proceeding, but where the majority of the employees of a craft so decide, the craft unit must prevail.

The Rhode Island law lists 10 unfair labor practices of employers, including spying on legitimate employee activities, blacklisting, dominating labor organizations, and refusing to bargain with a majority union. The law also is more specific than the Wagner Act in outlining the affirmative action which the board may require of employers. Employers are permitted to file petitions which the board must investigate, although an election may not be ordered on the petition of the employer alone. Certifications pursuant to an election are effective for 1 year. Members of the board are to be paid on a per diem basis and they may not be paid for more than 40 days during the year.

The collective-bargaining provisions of the Minnesota Labor Relations Act were amended in several respects (ch. 469). The legislature added to the list of unfair labor practices the violation of collective-bargaining contracts, whether by employees or employers. The former provision requiring the registration of labor unions and employer organizations was repealed. In order to eliminate delays in hearings and decisions by courts when temporary injunctions have been issued to restrain unfair labor practices, the amendment provides that hearings must take place within 7 days and decisions made within 60 days thereafter. In addition, under the amended act, the labor conciliator is empowered to subpoena witnesses and require the production of records in proceedings for determining bargaining agents.

In Maine, the State mediation act was amended (ch. 292) to declare that "workers shall have full freedom of association, self-organization, and designation of representatives of their own choosing, for the

¹ In Massachusetts, New York, Pennsylvania, Utah, and Wisconsin.

² Pennsylvania and Wisconsin.

purpose of negotiating the terms and conditions of their employment or other mutual aid or protection, free from interference, restraint or coercion by their employers or other persons." This declaration differs from the provisions of other statutes which aim to protect employees against coercion by employers alone.

In Massachusetts, an amendment (ch. 261) relating to court review of decisions of the State labor relations commission was adopted. Under it the court is required to state its reasons for enforcing, modifying, or setting aside an order of the commission. California enacted a law (ch. 1188), which provides that a collective-bargaining agreement between an employer and a labor organization shall be enforceable at law or in equity, and gives either party the right to obtain an injunction in case there is a breach of the agreement.

Discrimination in Union Membership

Discrimination in the membership of labor unions is prohibited by a new statute in Kansas (ch. 265). This act provides that any labor organization which discriminates or excludes from its membership any person because of his race or color may not be the representative unit of employees for the purpose of collective bargaining. The provisions of this act, however, do not apply to railway labor organizations. A law somewhat similar to the Kansas act was enacted in Nebraska (ch. 96). This legislation declares it to be against public policy for a representative of labor, in collective bargaining with employers, to discriminate against any person because of his race or color. The department of labor has been charged with the enforcement of this policy, but the law does not specify any particular methods to be used in its enforcement.

"Kick-Back" of Wages and Union Incorporation

In Illinois (S. 25) the "Kick-Back" of wages established by collective-bargaining agreements is prohibited. This act provides that where there is a collective-bargaining agreement which requires the employees to be paid a stipulated minimum wage, it shall be unlawful for any person to request or demand the refund of any part of an employee's wages to the employer. Violations are punishable by fines ranging from \$100 to \$300 for each employee affected.

In Texas (H. 16) a union which desires to become incorporated may obtain a charter hereafter only after the commissioner of labor statistics has made an investigation of the application and has made a favorable recommendation to the secretary of state.

Injunctions in Labor Disputes

A new law (ch. 15) was passed in New Jersey limiting the issuance of injunctions in labor disputes. This act is modeled along the lines of the Federal Norris-LaGuardia Act and similarly defines broadly the term "labor dispute," in that the disputants are not required to stand in the proximate relation of employer and employee. In the case of a labor dispute, the act provides that no temporary or permanent injunction may be issued by a court without previous notice and until after hearing the testimony of witnesses in open court. However, a temporary restraining order may be issued without notice, if it is sufficiently proved that otherwise substantial and irreparable injury to property will be unavoidable. A permanent injunction is effective for only 6 months from the date the decree or order is filed, but it may be extended for an additional 6 months if, after a further hearing, the court determines that such continuance is necessary.

In cases of contempt growing out of violation of an injunction, the right of trial by jury is guaranteed and the case may not be heard by the judge who issued the injunction. The act also specifically legalizes peaceful picketing and closed-shop contracts. Before the passage of this legislation, the New Jersey courts had consistently held closed-shop contracts void and had enjoined picketing to obtain or enforce such contracts, even though the picketing was peaceful. Within a few weeks after the passage of this legislation, a New Jersey court refused to grant an injunction against picketing in order to bring about a closed shop.³

Settlement of Disputes

Important changes were made in the mediation provisions of the Minnesota Labor Relations Act, in addition to amendments relating to collective bargaining. Under the original act a notice was required to be given of a desire to negotiate a collective-bargaining agreement or to make any changes in rates of pay, rules, or working conditions. If no agreement was reached in 10 days, a notice of intention to strike or lock out had to be given to the labor conciliator and the other parties to the labor dispute at least 10 days before the effective date of the strike or lock-out. Under the 1941 amendment, a new notice is required if the strike or lock-out is not instituted within 90 days from the date of service of the original notice. However, the 90-day period may be extended by written agreement of the parties filed with the labor conciliator. Prior to the enactment of this amendment it was possible for a union to file a notice and call a strike at any subsequent time.

³ See Monthly Labor Review, July 1941 (p. 139.)

The Minnesota Legislature also clarified the procedure in disputes in industries affected with a public interest. In such cases the Governor is authorized to appoint a commission to conduct hearings and make a report. The original act provided that a strike or lock-out was not permissible until after the report was filed, or until 30 days after the Governor was notified of the dispute. The amended act, however, provides that when the labor conciliator notifies the Governor of a dispute, the Governor must, if he decides to appoint an investigative commission, notify the conciliator to that effect. If he does not notify him within 5 days after receiving notice of the dispute, the 30-day requirement does not apply. The requirement may later become effective if the Governor decides thereafter to appoint a commission and no strike or lock-out has been instituted in the meantime.

In two States (New Jersey and North Carolina) new agencies for the mediation of labor disputes were established and New York amended its law. The North Carolina law (ch. 362) creates a conciliation service in the department of labor. In the event of a labor dispute the commissioner of labor may, and upon the direction of the Governor must, order a conciliator to take such steps as seem expedient. The conciliator is required to communicate promptly with the parties to the controversy and to use his best efforts, by mediation, to bring about an agreement. The New Jersey law (ch. 100) creates a board of mediation in the department of labor, composed of five members appointed by the Governor for 3-year terms. The board is authorized on its own motion to mediate labor disputes, and on the request of either party to the controversy, it must attempt to effect a settlement of the dispute. The act also provides for the voluntary arbitration of labor disputes.

In New York, the State commissioner of labor is authorized to appoint boards of inquiry to investigate any dispute involving an actual or threatened strike or lock-out (ch. 143). However, prior to this procedure the dispute must be certified to the commissioner by the State board of mediation, with a statement that its mediating efforts have been unsuccessful. This plan parallels the national plan adopted by the President when he created the National Defense Mediation Board. However, under the New York law this method of settling disputes is not limited to defense industries. The board of inquiry appointed for dealing with a dispute is empowered to subpoena witnesses and compel the production of records. Reports of its findings may be made public by the labor commissioner. Another New York law (ch. 217) authorizes the Governor to increase the membership of the State mediation board from 5 to 7 members whenever deemed necessary.

Strikes and Lock-Outs

Several States enacted prohibitory legislation, limiting the rights of labor to strike and picket. In Georgia, for example, all unions except those functioning in seasonal industries and on railroads are prohibited from striking until 30 days after written notice of their intention has been given employers. The provisions of the law apply not only to strikes but to "slow-downs" or other work stoppages caused by union activities. However, no such requirement is made with regard to lock-outs by employers. Furthermore, no provision is made for the mediation of disputes.

In Texas a drastic antipicketing law was enacted. This act makes it a felony for any person to prevent or attempt to prevent, by the use of force, any person from engaging in a lawful employment. Violations are punishable by imprisonment for not less than 1 year nor more than 2 years. Assembly for the purpose of carrying out the forbidden acts in connection with a labor dispute is similarly penalized.

A law against so-called sit-down strikes was adopted in Maryland (ch. 340). This act prohibits the occupation of factories or buildings of an employer by employees or former employees after he has given them a notice to leave, when the effect is to deprive the employer of substantial possession, control, or use of land, property, or buildings. Violations are punishable by a fine up to \$50 and, in addition, the law imposes financial liability on organizations responsible for such illegal occupation of private property.

Hereafter, in Illinois, employers advertising for employees during a strike or lock-out must state that a strike or lock-out exists.

A so-called hot-cargo law was adopted by the California Legislature over the Governor's veto. However, the law is suspended pending a referendum of the people in November 1942. This measure would outlaw secondary boycotts and refusals by unions to handle goods produced by a firm on strike or by nonunion labor. In addition, the law would prohibit the use of economic pressure to induce an employer to refrain from doing business with another employer because of a labor dispute. Secondary boycotts based on union agreements would also be forbidden.

Industrial Disputes

RECENT STRIKES

THERE was a substantial drop in strike activity in November 1941 from the preceding month, preliminary estimates indicating 300 new strikes, in which there were 235,000 workers involved, and 1,450,000 man-days of idleness during all strikes in progress during the month. There were only two-thirds as many strikes as in October, the number of workers involved dropped about 14 percent and the idleness during strikes about 25 percent.

About half of the workers involved in the November strikes were bituminous-coal miners in commercial mines striking in sympathy with the "captive" miners' demand for a union shop. (See page 94).

November strike activity was still well above the level of November 1940, and above the average for November during the pre-defense period (1935-1939) as shown in the following table:

Strikes in October and November 1941 Compared with Averages for the Preceding 5-Year Period

Item	November 1941 ¹	October 1941 ¹	November 1940	Average for 5-year period, 1935-39	
				November	October
Number of strikes beginning in month.....	300	450	207	185	233
Number of workers involved in new strikes....	235,000	272,000	62,399	52,738	75,128
Number of man-days idle during all strikes in progress during month.....	1,450,000	1,960,000	739,807	1,229,731	1,229,804

¹ Preliminary estimates.

STRIKES IN SEPTEMBER 1941 ¹

THE high level of strike activity which began in the spring of 1941 continued through the month of September. The Bureau has received detailed reports on 421 strikes which began in September, involving nearly 280,000 workers. There were 188 strikes which continued into September from preceding months, making a total of 609 in progress and resulting in 1,874,000 man-days of idleness in September.

The largest strikes during the month were in coal mining. In addition to the captive-mine strike described on page 94, there was a

¹ The Bureau's statistics exclude strikes lasting less than 1 day or involving fewer than 6 workers.

wage strike of more than 20,000 Alabama coal miners from September 2 to 7, and a strike of more than 25,000 anthracite miners in eastern Pennsylvania from September 9 to October 8 in protest against payment of increased union dues as voted by their union. In other industries there were a few strikes fairly large in terms of the number of workers involved, namely, a 1-day strike of 19,000 workers at the Dodge plant of the Chrysler Corporation in Detroit, Mich., a short strike at the Briggs Manufacturing Co. in Detroit, which involved more than 7,000 workers, and a short strike at plants of the Tennessee Coal, Iron & Railroad Co. in the Birmingham district, Ala., which made approximately 14,000 workers idle for 1 day.

TABLE 1.—Trend of Strikes, 1935 to September 1941

Year and month	Number of strikes			Workers involved in strikes			Man-days idle during month or year
	Beginning in month or year	In progress during month	Ending in month	Beginning in month or year	In progress during month	Ending in month	
1935.....	2,014	-----	-----	1,117,213	-----	-----	15,456,337
1936.....	2,172	-----	-----	788,648	-----	-----	13,901,956
1937.....	4,740	-----	-----	1,860,621	-----	-----	28,424,857
1938.....	2,772	-----	-----	688,376	-----	-----	9,148,273
1939.....	2,613	-----	-----	1,170,962	-----	-----	17,812,219
1940.....	2,508	-----	-----	576,988	-----	-----	6,700,872
1940							
January.....	128	222	124	26,937	41,284	32,743	246,674
February.....	172	270	153	29,509	38,050	17,252	289,992
March.....	178	295	187	22,433	43,231	29,593	386,981
April.....	228	336	214	39,481	53,119	29,226	441,866
May.....	239	361	239	53,231	77,124	59,263	665,688
June.....	214	336	190	38,542	56,403	36,559	484,007
July.....	244	390	227	63,126	82,970	54,100	585,651
August.....	231	394	253	61,356	90,226	47,199	706,308
September.....	253	394	242	65,362	108,389	72,523	780,570
October.....	267	419	253	71,997	107,863	68,730	915,014
November.....	207	373	243	62,399	101,532	82,571	739,807
December.....	147	277	168	42,615	61,576	43,605	458,314
1941¹							
January.....	232	341	217	91,562	109,533	53,915	659,285
February.....	253	377	230	69,769	125,387	64,909	1,129,556
March.....	338	485	303	116,320	176,798	122,848	1,553,860
April.....	395	577	381	510,879	564,829	468,390	7,106,201
May.....	450	646	442	324,544	420,983	339,234	2,182,603
June.....	340	544	364	141,142	222,891	144,077	1,468,856
July.....	413	593	387	140,255	219,069	134,232	1,306,734
August.....	430	636	448	208,477	293,314	238,171	1,757,317
September.....	421	609	412	279,737	334,880	203,412	1,874,285

¹ Succeeding reports may show slightly different figures for the various months due to corrections and additions made as later information is received.

During September 1.18 percent of the employed workers were involved in strikes at some time during the month, although the idleness during all strikes in September amounted to only 0.29 percent of the available working time. About 42 percent of the workers in the anthracite industry were involved in strikes—principally in the “union-dues” strike referred to previously—and 17 percent of the workers in bituminous-coal mining were involved in strikes occasioned almost entirely to the captive-mine and Alabama wage disputes

referred to above. Other industry groups with comparatively large proportions of workers involved were iron and steel (3.22 percent), transportation equipment (4.53 percent), tobacco manufactures (4.79 percent), and rubber products (4.40 percent). Accounting for these high proportions in large part were the Tennessee Coal, Iron & Railroad Co. dispute in Alabama, the Dodge and Briggs strikes in Detroit, the strike of about 2,000 workers in six plants of the Deisel-Wemmer-Gilbert Corporation (cigar manufacturing) in Michigan and Ohio which started late in August and continued for about 3 weeks in September, and a short strike of about 5,000 workers at the Detroit plant of the United States Rubber Co.

TABLE 2.—*Workers Involved and Man-Days Idle During Strikes, Compared with Total Workers and Available Work, September 1941*

Industry or group	Percent of employed workers ¹ involved in strikes during September 1941	Man-days idle during strikes as a percentage of the total man-days of work available ²		Man-days idle during strikes per employed worker, January-September 1941
		September 1941	January-September 1941	
	Percent	Percent	Percent	Days
All industries	1.18	0.29	0.36	0.7
All manufacturing groups	1.87	.46	.53	1.0
Iron, steel, and their products, excluding machinery.....	3.22	.63	.48	.9
Machinery, excluding transportation equipment.....	1.14	.30	.62	1.4
Transportation equipment.....	4.53	.49	1.09	2.1
Nonferrous metals and their products.....	1.23	.68	.49	1.0
Lumber and allied products.....	1.43	.67	.74	1.4
Stone, clay, and glass products.....	1.32	.52	.88	1.7
Textiles and their products.....	1.60	.43	.36	.7
Fabrics.....	1.76	.47	.33	.7
Wearing apparel.....	1.49	.42	.44	.9
Leather and its manufactures.....	1.49	.54	.27	.5
Food and kindred products.....	1.06	.34	.44	.9
Tobacco manufactures.....	4.79	2.50	.56	1.1
Paper and printing.....	.41	.21	.15	.3
Chemicals and allied products.....	1.27	.19	.28	.5
Rubber products.....	4.40	.48	.46	.9
Building and construction.....	.32	.10	.27	.5
Mining:				
Anthracite.....	42.19	14.70	3.30	5.0
Bituminous coal.....	17.23	3.04	8.51	14.1
Metalliferous.....	1.07	.24	.18	.4
Quarrying and nonmetallic.....	.32	.10	.08	.2

¹ "Employed workers" as used here includes all workers except those in occupations and professions where strikes rarely, if ever, occur. In general, the term "employed workers" includes all employees except the following groups: Government workers, agricultural wage earners on farms employing less than 6, managerial and supervisory employees, and certain groups which, because of the nature of their work, cannot or do not strike, such as teachers, clergymen, and domestic servants. Self-employed and unemployed persons are, of course, excluded.

² "Total man-days of work available" was estimated for purposes of this table by multiplying the total employed workers in each industry or group by the number of days worked by most employees in the respective groups.

The idleness during strikes in September amounted to nearly 15 percent of the available working time in the anthracite-mining industry, 3 percent in bituminous-coal mining, and 2½ percent in the tobacco industry.

In the 9-month period, January-September 1941, the idleness during all strikes amounted to 0.36 percent of the available working time.

In bituminous-coal mining idleness during strikes in the 9-month period amounted to 8.51 percent of the available working time, in anthracite mining, 3.3 percent, and in all manufacturing industries it amounted to slightly more than one-half of 1 percent.

During the first 9 months of 1941, the idleness during strikes amounted to less than 1 day (0.7) per employed worker (table 2). In all manufacturing industries there was 1 man-day of idleness for each employed worker. In the industries manufacturing transportation equipment, the idleness amounted to 2.1 days per employed worker; in anthracite mining it was 5 days, and in bituminous-coal mining, more than 14 days.

Industries Affected

Of the 1,874,000 man-days of idleness during strikes in September, approximately 550,000 were in the mining industries—principally anthracite and bituminous coal. The iron and steel products industries had about 183,000 man-days of idleness, machinery manufacturing industries 129,000, and transportation-equipment manufacturing 122,000. Of the approximately 280,000 workers involved in strikes beginning in September, 104,000 were in the mining industries, 44,000 had been engaged in manufacturing transportation equipment, 36,000 were in the iron and steel industries, 17,000 were in the textile industries, and 15,000 were in machinery manufacturing industries. The largest number of new strikes in any industry group was 44 in wholesale and retail trade. There were 40 strikes in the iron and steel industries, 38 in textiles, 33 in lumber and allied products, and 32 in transportation and communication.

TABLE 3.—*Strikes in September 1941, by Industry, with Comparative Man-Day Figures for the Preceding 2 Years*

Industry	September 1941			Number of man-days idle during the 12-month period ending with—	
	Strikes beginning in month		Number of man-days idle during month	September 1941	September 1940
	Number	Workers involved			
All industries.....	421	279, 737	1, 874, 285	21, 055, 381	8, 144, 692
Iron, steel, and their products, excluding machinery.....	40	36, 354	183, 138	1, 173, 803	372, 002
Blast furnaces, steel works, and rolling mills.....	18	27, 704	75, 087	365, 313	107, 901
Bolts, nuts, washers, and rivets.....	2	847	6, 031	24, 458	249
Cast-iron pipe and fittings.....				54, 509	43, 772
Cutlery (not including silver and plated cutlery) and edge tools.....			6, 030	15, 173	
Forgings, iron and steel.....	1	154	1, 784	31, 251	4, 020
Hardware.....	2	626	770	7, 933	13, 001
Plumbers' supplies and fixtures.....	3	1, 215	23, 617	74, 632	24, 564
Steam and hot-water heating apparatus and steam fittings.....	4	1, 984	13, 382	78, 003	20, 058
Stoves.....			18, 870	78, 530	26, 729

TABLE 3.—*Strikes in September 1941, by Industry, with Comparative Man-Day Figures for the Preceding 2 Years—Continued*

Industry	September 1941			Number of man-days idle during the 12-month period ending with—	
	Strikes beginning in month		Number of man-days idle during month	September 1941	September 1940
	Number	Workers involved			
Iron, steel and their products, excluding machinery—Con.					
Structural and ornamental metal work	1	160	640	31,812	17,842
Tin cans and other tinware	1	2,614	33,168	74,860	24,500
Tools (not including edge tools, machine tools, files, and saws)				11,698	5,009
Wire and wire products				153,963	9,855
Other	8	1,050	3,740	171,668	74,442
Machinery, excluding transportation equipment	27	15,415	129,144	2,272,848	632,199
Agricultural implements			201	483,874	17,762
Cash registers, adding machines, and typewriters				88,691	133
Electrical machinery, apparatus, and supplies	8	3,031	26,650	582,154	209,290
Engines, turbines, tractors, and water wheels	1	831	1,662	25,868	31,572
Foundry and machine-shop products	7	2,557	25,877	731,094	267,366
Machine tools (power driven)	3	2,131	22,781	115,846	6,498
Radios and phonographs	1	1,600	12,500	64,092	9,234
Textile machinery and parts				4,206	
Other	7	5,265	39,473	177,023	90,244
Transportation equipment	30	44,309	121,690	2,101,673	2,153,503
Aircraft	7	3,759	10,446	124,655	1,258
Automobiles, bodies and parts	12	32,271	59,213	1,130,999	2,032,058
Cars, electric- and steam-railroad (including repair shops)	2	1,643	28,746	213,420	73,398
Locomotives	1	200	379	379	
Shipbuilding	8	6,436	22,903	625,310	38,901
Other				6,910	7,888
Nonferrous metals and their products	11	2,809	57,293	416,173	208,413
Aluminum manufactures	1	30	240	95,677	2,706
Brass, bronze, and copper products	3	1,620	25,230	86,944	800
Clocks, watches, and other time-recording devices			18,288	33,840	
Jewelry	1	87	87	5,687	10,696
Lighting equipment				48,393	5,811
Silverware and plated ware				41,874	14,405
Smelting and refining—copper, lead, and zinc			168	2,710	89,444
Stamped and enameled ware	3	662	5,098	48,918	43,501
Other	3	410	8,182	52,130	41,250
Lumber and allied products	33	8,482	112,483	1,360,816	630,001
Furniture	16	4,600	58,674	306,638	185,369
Millwork and planing	5	937	10,496	96,018	83,492
Sawmills and logging camps	5	1,196	19,702	825,885	225,628
Other	7	1,749	23,611	132,275	125,512
Stone, clay, and glass products	16	3,429	42,900	627,686	182,507
Brick, tile, and terra cotta	3	308	5,041	171,691	56,608
Cement	2	87	453	24,438	8,322
Glass	1	2,071	24,049	118,733	53,843
Marble, granite, slate, and other products	1	40	80	190	866
Pottery	1	239	8,249	109,737	12,888
Other	8	684	4,128	202,897	49,980
Textiles and their products	38	16,842	187,114	1,468,249	706,408
Fabrics	14	8,242	127,397	867,335	238,024
Carpets and rugs				2,024	3,429
Cotton goods	5	4,468	65,706	375,399	95,757
Cotton small wares				1,123	810
Dyeing and finishing textiles	3	1,498	10,539	40,305	29,782
Silk and rayon goods	2	1,577	8,939	85,944	46,710
Woolen and worsted goods	1	430	12,671	208,310	12,788
Other	3	269	29,542	154,230	48,748
Wearing apparel	24	8,600	59,717	600,914	468,384
Clothing, men's	2	231	5,538	29,235	22,827
Clothing, women's	5	370	8,432	155,733	244,604
Corsets and allied garments	1	1,560	1,424	11,249	1,020
Men's furnishings	2	600	3,900	32,497	1,505
Hats, caps, and millinery	1	91	1,988	14,462	48,579
Shirts and collars	2	693	5,208	56,811	1,674
Hosiery	7	4,674	31,474	113,679	77,662
Knit goods	4	381	1,753	176,121	55,165
Other				11,127	15,346

TABLE 3.—Strikes in September 1941, by Industry, with Comparative Man-Day Figures for the Preceding 2 Years—Continued

Industry	September 1941			Number of man-days idle during the 12-month period ending with—	
	Strikes beginning in month		Number of man-days idle during month	September 1941	September 1940
	Number	Workers involved			
Leather and its manufactures	9	2,757	39,925	177,601	142,128
Boots and shoes.....	4	1,817	34,586	103,086	54,244
Leather.....	1	58	928	49,879	10,643
Other leather goods.....	4	882	4,411	24,636	77,241
Food and kindred products	24	6,375	84,748	807,956	149,012
Baking.....	5	123	2,824	165,392	26,954
Beverages.....	2	117	663	23,240	3,670
Butter.....	4	1,550	5,175	1,416	564
Canning and preserving.....	4	1,550	5,175	127,108	52,478
Confectionery.....	2	496	10,299	44,540	13,940
Flour and grain mills.....	1	189	7,791	45,558	5,572
Ice cream.....				901	11
Slaughtering and meat packing.....	3	2,026	40,969	170,551	33,985
Sugar refining, cane.....	1	495	12,242	160,899	
Other.....	6	1,379	4,783	68,351	11,838
Tobacco manufactures			50,832	95,903	104,034
Chewing and smoking tobacco and snuff.....					18
Cigars.....			50,832	95,903	104,016
Paper and printing	16	1,760	32,183	192,516	121,024
Boxes, paper.....	4	558	3,933	33,265	39,289
Paper and pulp.....	1	190	3,910	26,188	26,171
Printing and publishing:					
Book and job.....	3	88	10,268	39,516	5,936
Newspapers and periodicals.....	3	218	3,972	11,034	12,528
Other.....	5	706	10,100	82,513	37,100
Chemicals and allied products	7	4,769	21,279	296,753	155,172
Chemicals.....	3	4,312	4,967	146,335	11,358
Cottonseed—oil, cake, and meal.....				1,661	13,255
Druggists' preparations.....				863	1,010
Explosives.....			450	7,074	2,041
Fertilizers.....				1,863	104
Paints and varnishes.....			8,235	28,655	5,434
Petroleum refining.....				5,171	12,967
Rayon and allied products.....					85,000
Soap.....				834	
Other.....	4	457	7,627	104,297	24,003
Rubber products	3	6,585	16,452	145,802	80,950
Rubber boots and shoes.....	1	878	2,634	19,753	690
Rubber tires and inner tubes.....	1	5,200	10,800	52,472	67,268
Other rubber goods.....	1	507	3,018	73,577	12,992
Miscellaneous manufacturing	16	3,594	45,236	317,305	179,030
Electric light, power, and manufactured gas.....	5	398	960	12,199	6,026
Broom and brush.....	1	11	652	10,350	1,355
Furriers and fur factories.....	1	31	31	11,720	31,435
Other.....	9	3,154	43,593	283,036	140,214
Extraction of minerals	21	104,356	549,805	6,302,052	318,070
Coal mining, anthracite.....	4	29,095	241,357	390,380	89,266
Coal mining, bituminous.....	13	74,400	302,231	5,868,739	202,566
Metalliferous mining.....	4	861	4,731	30,054	21,626
Quarrying and nonmetallic mining.....			1,134	7,582	3,220
Crude petroleum producing.....			352	2,504	
Other.....				2,793	1,392
Transportation and communication	32	4,809	34,985	429,738	766,751
Water transportation.....	6	1,450	8,493	100,306	361,599
Motortruck transportation.....	17	2,407	18,504	196,299	129,629
Motorbus transportation.....	3	633	3,844	61,910	14,125
Taxis and miscellaneous.....	4	155	2,148	31,023	237,524
Electric railroad.....				35,274	779
Steam railroad.....	1	158	1,090	1,903	568
Telephone and telegraph.....				1,086	21,167
Radio broadcasting and transmitting.....	1	6	6	170	1,360
Other.....				1,767	

TABLE 3.—*Strikes in September 1941, by Industry, with Comparative Man-Day Figures for the Preceding 2 Years—Continued*

Industry	September 1941			Number of man-days idle during the 12-month period ending with—	
	Strikes beginning in month		Number of man-days idle during month	September 1941	September 1940
	Number	Workers involved			
Trade	44	5, 678	54, 955	1, 066, 888	249, 367
Wholesale.....	14	1, 956	18, 099	154, 424	64, 588
Retail.....	30	3, 722	36, 856	912, 464	184, 719
Domestic and personal service	17	5, 124	46, 136	241, 675	156, 218
Hotels, restaurants, and boarding houses.....	7	315	8, 946	129, 773	60, 742
Personal service, barbers, beauty parlors.....	3	4, 147	32, 201	35, 948	3, 546
Laundries.....	3	41	827	53, 398	45, 293
Dyeing, cleaning, and pressing.....	1	61	1, 080	8, 800	41, 761
Elevator and maintenance workers (when not attached to specific industry).....	3	500	3, 082	12, 828	4, 411
Other.....				928	465
Professional service	2	105	1, 133	40, 943	21, 367
Recreation and amusement.....	1	35	35	29, 558	16, 973
Professional.....				640	1, 346
Semiprofessional, attendants, and helpers.....	1	70	1, 098	10, 745	3, 098
Building and construction	24	3, 726	43, 068	965, 075	427, 471
Buildings, exclusive of PWA.....	20	3, 086	35, 607	908, 779	344, 875
All other construction (bridges, docks, etc., and PWA buildings).....	4	642	7, 461	56, 296	82, 596
Agriculture and fishing	2	224	520	420, 306	352, 254
Agriculture.....	2	224	520	411, 680	181, 821
Fishing.....				8, 626	170, 433
WPA and relief projects	1	104	1, 040	3, 654	15, 427
Other nonmanufacturing industries	8	2, 129	19, 138	129, 766	31, 295

States Affected

Pennsylvania had the greatest amount of strike activity in terms of number of workers involved and man-days of idleness during the month of September, although New York had more new strikes beginning in the month than any other State. In Pennsylvania the strike of anthracite miners protesting an increase in union dues involved about 25,000 workers and resulted in more than 230,000 man-days of idleness. The strike of bituminous-coal miners in the captive coal mines involved over 25,000 workers in Pennsylvania. Alabama had 43,000 workers involved in new strikes in September, as compared with 74,000 in Pennsylvania. The large number involved in Alabama was due largely to the State-wide strike of more than 20,000 coal miners which lasted from September 2 to 7 and to the strike in plants of the Tennessee Coal, Iron & Railroad Co. in the Birmingham area which involved nearly 15,000 workers. In Michigan there were nearly 42,000 workers involved in new strikes—most of them in the Dodge and Briggs disputes mentioned previously.

TABLE 4.—*Strikes in September 1941, by States, with Comparative Man-Day Figures for Preceding 2 Years*

State	Strikes beginning in September 1941		Number of man-days idle during September	Number of man-days idle during the 12-month period ending with—	
	Number	Workers involved		September 1941	September 1940
All States.....	421	279,737	1,874,285	21,055,381	8,144,692
Alabama.....	15	43,383	107,836	655,349	48,714
Arizona.....	2	55	365	17,597	3,011
Arkansas.....	5	1,993	27,525	40,768	83,836
California.....	36	6,720	44,475	1,760,883	663,324
Colorado.....				55,233	3,400
Connecticut.....	12	3,977	53,630	261,944	69,891
Delaware.....	1	45	450	60,224	4,992
District of Columbia.....	1	700	5,600	26,406	13,628
Florida.....	4	1,137	8,677	52,314	97,640
Georgia.....	5	822	12,415	63,831	34,627
Idaho.....			1,359	10,141	2,615
Illinois.....	19	7,570	81,699	1,441,950	462,168
Indiana.....	11	2,814	47,338	618,680	247,784
Iowa.....	5	491	8,153	237,653	13,807
Kansas.....	4	1,221	8,880	24,017	2,450
Kentucky.....	4	4,557	27,191	725,382	18,434
Louisiana.....	6	1,569	10,419	58,207	35,004
Maine.....	2	107	334	44,985	2,405
Maryland.....	7	4,538	11,986	167,687	128,433
Massachusetts.....	13	5,060	125,872	465,394	267,652
Michigan.....	27	41,889	133,518	1,669,346	2,088,450
Minnesota.....	3	445	11,068	107,649	79,863
Mississippi.....	1	52	52	10,371	21,059
Missouri.....	14	3,728	30,702	309,965	248,872
Montana.....			71	7,459	7,518
Nebraska.....			201	3,929	1,803
Nevada.....			456	1,409	1,056
New Hampshire.....	1	574	3,486	14,915	6,906
New Jersey.....	24	13,929	76,158	960,347	298,837
New Mexico.....				26,260	6,826
New York.....	67	14,303	167,901	1,982,918	1,172,822
North Carolina.....	5	1,433	10,621	123,069	86,627
North Dakota.....			140	1,899	6,798
Ohio.....	35	16,756	127,052	1,146,529	267,520
Oklahoma.....			156	8,853	18,764
Oregon.....	3	444	6,640	201,879	119,117
Pennsylvania.....	57	74,094	553,014	3,802,444	682,495
Rhode Island.....		206	2,656	76,476	17,874
South Carolina.....	2	1,107	3,342	54,475	54,958
South Dakota.....	1	277	3,327	3,836	241
Tennessee.....	10	2,098	36,818	381,821	66,501
Texas.....	6	265	5,957	127,853	84,302
Utah.....				41,728	3,367
Vermont.....	1	23	46	4,022	6,795
Virginia.....	1	950	1,822	214,667	145,752
Washington.....	7	1,147	19,232	763,290	237,159
West Virginia.....	11	17,221	86,378	1,673,198	54,654
Wisconsin.....	8	2,007	9,267	541,529	153,791
Wyoming.....				4,600	150

¹ The sum of this column is more than 421. This is due to the fact that 10 strikes which extended across State lines have been counted in this table as separate strikes in each State affected, with the proper allocation of number of workers involved and man-days idle.

Number of Workers Involved

The average number of workers involved in the 3,272 strikes beginning in the first 9 months of the year was 575. In the 421 strikes beginning in September the average was 664 per strike. About 52 percent of the strikes in the 9-month period involved fewer than 100

workers each, 32 percent involved from 100 up to 500 workers each, and about 16 percent involved 500 or more workers each (table 5). In the latter group there were 23 strikes in each of which 10,000 or more workers were involved. Five of these were new strikes beginning in September and have been referred to previously.

TABLE 5.—*Strikes Beginning in the First 9 Months of 1941, by Industry Group and Number of Workers Involved*

Industry group	Total	Number of strikes in which the number of workers involved was—							
		6 and under 20	20 and under 100	100 and under 250	250 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000	10,000 and over
All industries:									
Number.....	3, 272	534	1, 162	667	375	274	219	18	23
Percent.....	100. 0	16. 3	35. 4	20. 4	11. 5	8. 4	6. 7	0. 6	0. 7
<i>Manufacturing</i>									
Iron, steel, and their products, excluding machinery.....	268	12	57	66	55	41	30	3	4
Machinery, excluding transportation equipment.....	233	14	80	43	43	30	21	1	1
Transportation equipment.....	136	4	21	26	13	29	32	6	5
Nonferrous metals and their products.....	96	15	28	22	15	5	10	1	—
Lumber and allied products.....	230	23	90	70	28	14	4	—	1
Stone, clay, and glass products.....	109	11	44	27	11	7	9	—	—
Textiles and their products.....	392	58	140	72	53	38	30	1	—
Leather and its manufactures.....	69	6	26	10	14	12	1	—	—
Food and kindred products.....	202	33	82	38	20	17	11	1	—
Tobacco manufactures.....	5	—	—	—	—	1	4	—	—
Paper and printing.....	105	27	35	29	9	4	1	—	—
Chemicals and allied products.....	62	6	29	10	10	3	4	—	—
Rubber products.....	37	3	7	6	7	10	3	1	—
Miscellaneous manufacturing.....	119	26	45	26	12	7	3	—	—
<i>Nonmanufacturing</i>									
Extraction of minerals.....	113	5	25	15	22	19	19	1	7
Transportation and communication.....	188	35	84	46	7	9	6	1	—
Trade.....	296	105	129	36	16	5	5	—	—
Domestic and personal service.....	160	52	65	27	5	6	5	—	—
Professional service.....	22	6	12	2	1	1	—	—	—
Building and construction.....	308	65	114	68	29	13	12	2	5
Agriculture and fishing.....	22	1	9	6	2	2	2	—	—
WPA and relief projects.....	4	2	1	1	—	—	—	—	—
Other nonmanufacturing industries.....	96	25	39	21	3	1	7	—	—

Causes of Strikes

About 45 percent of the strikes beginning in September, including 33 percent of the total workers involved, were over union-organization matters principally (table 6). In many of these, wages and hours were secondary issues. The disputes in which wage-and-hour matters were the principal issues amounted to 39 percent of the total and included 36 percent of the workers. About 16 percent of the strikes in September, including 31 percent of the workers, were over issues other than wages and hours or union-organization matters. These strikes involved a variety of issues including working conditions, protests against disciplinary lay-offs or discharges, increased work load, and objection to certain foremen or supervisors.

TABLE 6.—*Strikes Beginning in September 1941, by Major Issues Involved, with Cumulative Figures for the Period, January–September 1941*

Major issue	Strikes beginning in September 1941				Strikes beginning in the period, January–September 1941			
	Number	Per-cent of total	Work-ers in-volved	Per-cent of total	Number	Per-cent of total	Work-ers in-volved	Per-cent of total
All issues.....	421	100.0	279,737	100.0	3,272	100.0	1,882,685	100.0
Wages and hours.....	163	38.7	100,531	35.9	1,186	36.2	957,772	50.9
Wage increase.....	141	33.5	91,848	32.8	1,033	31.6	893,100	47.5
Wage decrease.....	7	1.7	2,817	1.0	47	1.4	36,215	1.9
Wage increase, hour decrease.....	14	3.3	5,848	2.1	99	3.0	28,200	1.5
Wage decrease, hour increase.....	1	.2	18	(¹)	7	.2	257	(¹)
Union organization.....	189	44.9	93,334	33.4	1,618	49.5	632,726	33.6
Recognition.....	26	6.2	5,532	2.0	293	9.0	179,796	9.5
Recognition and wages.....	69	16.4	12,721	4.5	633	19.3	187,799	10.0
Recognition and hours.....					2	.1	46	(¹)
Recognition, wages, and hours.....	19	4.5	3,514	1.3	177	5.4	23,044	1.2
Discrimination.....	19	4.5	4,089	1.5	138	4.2	35,464	1.9
Strengthening bargaining position.....	13	3.1	8,279	3.0	74	2.3	73,886	3.9
Closed or union shop.....	38	9.0	57,095	20.3	267	8.2	113,984	6.1
Other.....	5	1.2	2,104	.8	34	1.0	18,707	1.0
Miscellaneous.....	69	16.4	85,872	30.7	468	14.3	292,187	15.5
Sympathy.....	2	.5	189	.1	28	.9	31,464	1.7
Rival unions or factions.....	19	4.5	31,644	11.3	137	4.2	104,734	5.6
Jurisdiction ²	8	1.9	2,504	.9	66	2.0	9,577	.5
Other.....	40	9.5	51,535	18.4	226	6.9	145,664	7.7
Not reported.....					11	.3	748	(¹)

¹ Less than a tenth of 1 percent.² It is probable that the figures here given do not include all jurisdictional strikes. Due to the local nature of these disputes, it is difficult for the Bureau to find out about all of them.

Labor Organizations Involved

Unions affiliated with the American Federation of Labor were involved in slightly more than half the strikes beginning in the first 9 months of the year. These strikes included one-fourth of the total workers involved. Nearly 70 percent of the total workers involved were in strikes called by unions affiliated with the Congress of Industrial Organizations—37 percent of all strikes. Strikes in which 2 rival unions were involved comprised about 4 percent of the total and involved the same proportion of the total workers. There was no union organization involved in 3 percent of the strikes, which included less than 1 percent of the total workers involved.

TABLE 7.—*Strikes Beginning in the First 9 Months of 1941, by Affiliations of Labor Organizations Involved*

Labor organization involved	Strikes		Workers involved	
	Number	Percent of total	Number	Percent total
Total.....	3,272	100.0	1,882,685	100.0
American Federation of Labor.....	1,748	53.4	476,477	25.3
Congress of Industrial Organizations.....	1,223	37.4	1,292,953	68.7
Unaffiliated unions.....	51	1.6	20,409	1.1
Railroad brotherhoods.....	2	.1	82	(¹)
Two rival unions.....	128	3.9	73,725	3.9
Company unions.....	14	.4	2,531	.1
No organization.....	104	3.2	16,333	.9
Organization involved, but type not reported.....	1	(¹)	7	(¹)
Not reported.....	1	(¹)	168	(¹)

¹ Less than a tenth of 1 percent.

Duration of Strikes

The average duration of the 3,184 strikes ending in the period January to September was 17½ calendar days. Forty-one percent of these strikes ended less than a week after they began, 43 percent lasted from a week up to a month, 13 percent were in effect from 1 to 3 months, and 3 percent (85 strikes) had lasted 3 months or more. Most of the strikes in the latter group were small, only 9 involving 500 or more workers.

TABLE 8.—*Strikes Ending in the 9-Month Period, January–September 1941, by Industry Group and Duration*

Industry group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than ½ month	½ and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries:							
Number.....	3,184	1,316	794	572	335	82	85
Percent.....	100.0	41.3	24.9	18.0	10.5	2.6	2.7
<i>Manufacturing</i>							
Iron, steel, and their products, excluding machinery.....	257	130	62	31	27	5	2
Machinery, excluding transportation equipment.....	228	78	63	46	31	8	2
Transportation equipment.....	128	64	42	16	5	1	—
Nonferrous metals and their products.....	92	30	28	20	10	1	3
Lumber and allied products.....	226	61	54	63	30	6	12
Stone, clay, and glass products.....	105	29	28	20	14	9	5
Textiles and their products.....	370	136	99	78	37	6	14
Leather and its manufactures.....	65	21	22	14	6	1	1
Food and kindred products.....	196	81	43	39	20	7	6
Tobacco manufactures.....	5	—	2	1	2	—	—
Paper and printing.....	103	37	17	20	23	4	2
Chemicals and allied products.....	59	19	17	10	11	—	2
Rubber products.....	38	17	10	4	5	1	1
Miscellaneous manufacturing.....	122	36	33	25	21	5	2
<i>Nonmanufacturing</i>							
Extraction of minerals.....	109	60	23	12	7	4	3
Transportation and communication.....	184	100	41	29	9	3	2
Trade.....	286	112	64	57	32	11	10
Domestic and personal service.....	159	73	33	29	11	4	9
Professional service.....	24	12	5	3	1	1	2
Building and construction.....	306	156	79	41	23	2	5
Agriculture and fishing.....	22	12	6	2	1	—	1
WPA and relief projects.....	5	2	1	1	—	—	1
Other nonmanufacturing industries.....	95	50	22	11	9	3	—

Methods of Negotiating Settlements

Government officials or boards assisted in the settlement of more than half (52 percent) of the strikes ending in the first 9 months of the year. These strikes included 74 percent of the total workers involved. In 56 of these strikes, involving 463,858 workers, the National Defense Mediation Board assisted in the settlement. Thirty-four percent of the strikes involving 22 percent of the workers were settled directly by negotiations between the employers and representatives of organized workers. In about 10 percent of the strikes, including only 3 percent of the workers involved, no formal

settlements were reached. In these strikes the workers returned to their jobs without settlement of the disputed issues or they lost their jobs entirely when employers replaced them with new workers, moved, or went out of business.

TABLE 9.—*Methods of Negotiating Settlements of Strikes Ending in the 9-Month Period January–September 1941*

Settlement negotiations carried on by—	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total ¹
Total.....	3, 184	100. 0	1, 769, 188	100. 0
Employers and workers directly.....	70	2. 2	8, 699	. 5
Employers and representatives of organized workers directly.....	1, 086	34. 1	389, 255	22. 0
Government officials or boards.....	1, 668	52. 4	1, 308, 938	74. 0
Private conciliators or arbitrators.....	29	. 9	3, 728	. 2
Terminated without formal settlement.....	331	10. 4	58, 568	3. 3

Results of Strikes

Results of the strikes ending in the first 9 months of the year are classified in table 10. Forty-three percent of the strikes, including about the same proportion of the workers involved, were substantially won by the workers. Compromise settlements were obtained in 35 percent of the strikes, which included about 43 percent of the workers; and 14 percent of the strikes, including 6 percent of the workers, resulted in little or no gains for the employees involved.

TABLE 10.—*Results of Strikes Ending in the 9-Month Period, January–September 1941*

Result	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	3, 184	100. 0	1, 769, 188	100. 0
Substantial gains to workers.....	1, 373	43. 2	787, 022	44. 4
Partial gains or compromises.....	1, 128	35. 4	754, 710	42. 7
Little or no gains to workers.....	443	13. 9	107, 221	6. 1
Jurisdiction, rival union, or faction settlements.....	191	6. 0	83, 466	4. 7
Indeterminate.....	35	1. 1	35, 289	2. 0
Not reported.....	14	. 4	1, 480	. 1

The workers involved were a little more successful in the wage-and-hour strikes ending in the first 9 months of 1941 than in the union-organization disputes. In the wage-and-hour strikes they were substantially successful in 46 percent, compromised 43 percent, and made little or no gains in 11 percent. Forty-eight percent of the union-organization strikes were substantially won, but only 34 percent were compromised, and 18 percent brought little or no gains.

Of the workers involved in the strikes ending during this period, one-half of those involved in the wage-and-hour strikes substantially won their demands, 44 percent obtained compromise settlements, and 6 percent made little or no gains. In the union-organization strikes 43 percent of the workers were successful, about 48 percent made partial gains, and 7 percent made little or no gains.

TABLE 11.—*Results of Strikes Ending in the 9-Month Period, January–September 1941, in Relation to Major Issues Involved*

Major issue	Total	Strikes resulting in—					
		Substan- tial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdic- tion, rival union, or faction settle- ments	Inde- ter- minate	Not re- ported
Strikes							
All issues.....	3,184	1,373	1,128	443	191	35	14
Wages and hours.....	1,148	529	495	120	-----	2	2
Union organization.....	1,581	759	531	276	-----	13	2
Miscellaneous.....	455	85	102	47	191	20	10
Percentage distribution							
All issues.....	100.0	43.2	35.4	13.9	6.0	1.1	0.4
Wages and hours.....	100.0	46.0	43.1	10.5	-----	.2	.2
Union organization.....	100.0	48.0	33.6	17.5	-----	.8	.1
Miscellaneous.....	100.0	18.7	22.4	10.3	42.0	4.4	2.2
Workers involved							
All issues.....	1,769,188	787,022	754,710	107,221	83,466	35,289	1,480
Wages and hours.....	938,992	469,561	413,695	55,290	-----	245	201
Union organization.....	579,373	251,385	275,198	37,965	-----	14,791	34
Miscellaneous.....	250,823	66,076	65,817	13,966	83,466	20,253	1,245
Percentage distribution							
All issues.....	100.0	44.4	42.7	6.1	4.7	2.0	0.1
Wages and hours.....	100.0	50.0	44.1	5.9	-----	(1)	(1)
Union organization.....	100.0	43.4	47.4	6.6	-----	2.6	(1)
Miscellaneous.....	100.0	26.3	26.2	5.6	33.3	8.1	.5

¹ Less than a tenth of 1 percent.



CAPTIVE-COAL-MINE STRIKE AND SETTLEMENT

AT THE conclusion of the bituminous-coal stoppage of the Appalachian field in April 1941,¹ the "captive mines" (whose output is used almost exclusively by the steel companies which own them) reopened, with the consent of the United Mine Workers of America, pending completion of a new contract. With the mines operating under verbal concurrence in the Appalachian agreement, except

¹ See Monthly Labor Review, August 1941 (p. 456).

for the union-shop clause, negotiations on the single issue of the union shop proceeded fruitlessly between the union and the steel companies during the summer. The union issued a strike call which became effective on Monday, September 15, 1941, when 43,000 miners stopped work in "captive" mines in Pennsylvania, West Virginia, and Kentucky. The only major steel corporations having mines which were not involved were the Jones & Laughlin Steel Corporation and Allegheny-Ludlum Steel Corporation, which had already signed separate union-shop agreements.

The National Defense Mediation Board, considering the stoppage a part of the general bituminous-coal mining dispute certified to the Board in April, requested the next day that the miners return to work immediately. The miners agreed on September 19 to return on Monday, September 22, accepting a 30-day truce pending settlement. During this time the Appalachian agreement, with the exception of the union-shop clause, was to be in effect, and after 30 days the strike could be resumed upon a 3-day written notice by either side.

The Mediation Board issued no recommendations as to a basis of settlement of the union-shop issue and found that "there could be no meeting of minds in the conference before it with respect to the two conflicting rights asserted in the present dispute, because of the possible repercussions of any agreement here made on the steel and shipbuilding industries." The Board did, however, advance two alternate arbitration proposals: (1) That the recommendations of the full Mediation Board of 11 members be accepted, or (2) that the parties agree on a joint board made up of an equal number of representatives of both operators and miners which, if unable to reach an agreement, would select an arbitrator "who shall have the power to make a final decision binding upon both parties." On October 21 the union, refusing to accept these proposals, notified the National Defense Mediation Board that the truce would expire on midnight, October 25, and, despite appeals by President Roosevelt, the miners were called out again.

On October 27, approximately 53,000 mine workers failed to report for work in four States—this time including Alabama, where about 8,000 workers in captive mines remained idle after the rest of the Alabama coal fields had resumed operations following the settlement of a wage dispute. After a series of conferences of employer, union, and NDMB representatives with President Roosevelt, the union on October 30 agreed to reopen the mines until Saturday, November 15, "on the understanding that the National Defense Mediation Board will proceed in full session to consider the merits of the dispute and make its final recommendations" and "that neither party is committed in advance to the acceptance of the final recommendations."

On November 10, by a vote of 9 to 2 (with the 2 C. I. O. members dissenting) the Board recommended the adoption of the Appalachian agreement without the union-shop clause, stating that 95 percent of the workers at captive mines were already union members, that the union was apparently capable of completing organization of the industry, and that such a clause is not necessary to the security of the United Mine Workers. The minority opinion maintained that there was no basis for distinguishing between the captive-coal case and the shipbuilding case of the Bethlehem Steel Co., where the Board's recommendation that the company sign a closed-shop agreement had the effect of completing a closed-shop arrangement for the entire west coast shipbuilding industry. The dissenting members further stated: "The dispute in question has not been considered on its merits. To the contrary, the National Defense Mediation Board has now decided that henceforth, regardless of the merits of any case, labor unions must be denied the right of normal growth and legitimate aspirations, such as the union shop, and the traditional open-shop policy of the anti-labor employers must prevail."

Further conferences between union leaders, heads of the major steel companies, and the President failed, and the strike was resumed at midnight, November 15, the miners failing to report for work Monday morning, November 17.

Amid considerable violence, sympathy walk-outs at commercial mines spread rapidly, until by the end of the strike it was estimated that well over 100,000 workers, in addition to those at the captive mines, were out in Pennsylvania, West Virginia, Kentucky, Alabama, Maryland, Ohio, Indiana, and Virginia.

On November 22 the union's policy committee accepted a Presidential proposal to return to work, submitting their dispute to a special arbitration board, whose decision would be binding. Work was resumed the following Monday, after accumulated idleness of nearly 1,000,000 man-days, counting the three short stoppages (September, October, and November) of captive-mine workers and also the sympathy strike of workers at commercial mines in November.

The arbitration board was composed of John L. Lewis, president of the union; Benjamin Fairless, president of the United States Steel Corporation; and John R. Steelman, Director of the United States Conciliation Service, who was granted leave during arbitration proceedings.

Decision of Arbitration Board

On December 7, 1941, by a 2-to-1 decision the board awarded the mine workers the union shop in the captive mines.

In dissenting, the steel companies' representative on the board stated that the decision "imposes an unregulated labor monopoly

upon the entire bituminous-coal industry," and that it "violates the fundamental right of the American worker to a job regardless of membership or nonmembership in any organization."

The majority decision affirmed that the granting of the union shop was not a violation of a basic right or principle since Congress and Government agencies had already sanctioned the closed shop under certain conditions. Furthermore, in this instance, the union was asking for a union shop and not a closed shop; in other words, the employer would not be limited or restricted in his hiring. According to the agreement in force in the rest of the mining industry, which the union seeks to extend to the captive mines, "the management of the mine, the direction of the working force, and the right to hire and discharge are vested exclusively in the operator, and the United Mine Workers of America shall not abridge these rights." Since the union admits to membership only persons actually employed, it therefore does not control, limit, or determine the labor market accessible to any employer.

With regard to the desirability of changing union status during this period of national emergency, the arbitration award stated that there was "no basis for the charge that the union here is attempting to take advantage of the present national emergency for organizational purposes." Since the union already has as members 95 percent of the employees in these captive mines " * * * it is evident that, in this instance, the union is requesting the union shop in the normal course of its development. * * * The union shop is being sought here, in every realistic sense, to confirm and consolidate the position the union has already achieved. The union petitions for a contract whereby the organizational strength which it now has may not be jeopardized by future events."



ACTIVITIES OF THE UNITED STATES CONCILIATION SERVICE, NOVEMBER 1941

THE United States Conciliation Service, during November, disposed of 544 situations involving 267,496 workers. The services of this agency were requested by the employers, employees, and other interested parties (table 1). Of these situations, 133 were strikes and lock-outs involving 75,431 workers; 229 were threatened strikes and controversies involving 123,020 workers. Six disputes were certified during the month to the National Defense Mediation Board, and jurisdiction was assumed by other agencies in 19 others. The remaining 157 situations included investigations, arbitrations, requests for information, consultations, etc.

The facilities of the Service were used in 28 major industrial fields, such as building trades, and the manufacture of foods, iron and steel, textiles, etc. (table 2), and were utilized by employees and employers in 44 States, the District of Columbia, and Hawaii (table 3).

TABLE 1.—*Situations Disposed of by U. S. Conciliation Service, November 1941, by Type of Situation*

Type of situation	Number	Workers involved
All situations handled.....	544	267,496
Disputes.....	362	198,451
Strikes.....	132	75,422
Threatened strikes.....	155	102,390
Lock-outs.....	1	9
Controversies.....	74	20,630
Other situations.....	157	36,667
Investigations.....	56	20,833
Technical investigations and services.....	32	6,653
Arbitrations.....	26	3,895
Requests to conduct consent elections.....	3	1,408
Requests for information.....	10	10
Consultations.....	7	21
Special services of commissioners.....	13	3,831
Complaints.....	10	16
Disputes referred to other agencies during negotiations.....	25	32,378
To National Defense Mediation Board.....	6	15,715
To National Labor Relations Board.....	14	14,083
To other Federal agencies.....	2	1,200
To nongovernmental agencies.....	2	130
To State agencies.....	1	1,250

TABLE 2.—*Situations Disposed of by U. S. Conciliation Service, November 1941, by Industries*

Industry	Disputes		Other situations		Total	
	Num-ber	Workers involved	Num-ber	Workers involved	Num-ber	Workers involved
All industries.....	387	230,829	157	36,667	544	267,496
Agriculture.....	2	469			2	469
Automobile.....	17	11,232	4	128	21	11,360
Building trades.....	29	27,580	8	406	37	27,986
Chemicals.....	18	3,935	5	434	23	4,369
Communications.....	4	16,555	2	72	6	16,627
Domestic and personal.....	8	364	9	1,871	17	2,235
Electrical equipment.....	22	11,319	2	20	24	11,339
Food.....	24	3,973	12	1,090	36	5,072
Furniture and finished lumber.....	25	10,012	3	224	28	10,236
Iron and steel.....	61	55,177	19	5,066	80	60,233
Leather.....	10	3,209	2	131	12	3,340
Lumber.....	14	2,900	3	148	17	3,048
Machinery.....	23	6,977	3	60	26	7,037
Maritime.....	7	4,142			7	4,142
Mining.....	8	6,754	1	1	9	6,755
Nonferrous metals.....	18	14,510	8	8,469	26	22,979
Paper.....	2	402	2	369	4	771
Petroleum.....			8	1,135	8	1,135
Printing.....	6	254			6	254
Professional.....			1	300	1	300
Rubber.....	5	2,551	6	2,932	11	5,483
Stone, clay, and glass.....	10	1,229	5	4,066	15	5,295
Textile.....	18	11,439	21	5,726	39	17,165
Tobacco.....	3	7,310			3	7,310
Trade.....	11	2,085	1	1	12	2,086
Transportation.....	21	10,337	1	1	22	10,338
Transportation equipment.....	12	14,416	5	517	17	14,933
Utilities.....	5	1,237	3	215	8	1,452
Unclassified.....	4	461	23	3,286	27	3,747

TABLE 3.—Situations Disposed of by U. S. Conciliation Service, November 1941, by States

State	Disputes		Other situations		Total	
	Num-ber	Workers involved	Num-ber	Workers involved	Num-ber	Workers involved
All States.....	387	230,829	157	36,667	544	267,496
Alabama.....	14	1,313	3	627	17	1,940
Arizona.....	4	412	5	5,516	9	5,928
Arkansas.....	5	6,975	5	365	10	7,340
California.....	22	11,195	5	365	27	11,560
Colorado.....	1	60	1	1	2	61
Connecticut.....	7	5,430	4	405	11	5,835
Delaware.....	2	245	1	10	3	255
District of Columbia.....	1	155	6	1,301	7	1,456
Florida.....	17	10,236	4	54	21	10,290
Georgia.....	4	1,305	3	335	7	1,640
Hawaii.....	1	78	1	1	2	79
Idaho.....	2	1,020	2	1,020	4	2,040
Illinois.....	25	11,084	11	979	36	12,063
Indiana.....	11	4,607	6	4,317	17	8,924
Iowa.....	3	385	1	74	4	459
Kansas.....	1	17	2	245	3	262
Kentucky.....	16	9,409	2	150	18	9,559
Louisiana.....	8	1,637	3	510	11	2,147
Maine.....	1	1,900	2	153	3	2,053
Maryland.....	4	758	2	298	6	1,056
Massachusetts.....	3	1,421	8	1,139	11	2,560
Michigan.....	22	33,845	3	1,115	25	34,960
Minnesota.....	2	164	1	6	3	170
Mississippi.....	3	2,975	3	3	6	2,978
Missouri.....	9	10,763	3	252	12	11,015
Nebraska.....	1	48	1	1	2	49
Nevada.....	2	6,008	2	2	4	6,010
New Jersey.....	18	12,601	9	2,133	27	14,734
New Mexico.....	5	3,371	5	3,371	10	6,742
New York.....	32	29,816	13	5,283	45	35,099
North Carolina.....	15	4,256	12	3,532	27	7,788
North Dakota.....	1	1	1	1	2	2
Ohio.....	36	16,841	12	1,682	48	18,523
Oklahoma.....	2	144	1	29	3	173
Oregon.....	4	711	1	100	5	811
Pennsylvania.....	31	21,391	11	2,379	42	23,770
Rhode Island.....	3	494	3	494	6	988
South Carolina.....	3	2,200	4	2,211	7	4,411
Tennessee.....	9	1,600	2	176	11	1,776
Texas.....	7	1,307	1	27	8	1,334
Utah.....	1	12	1	11	2	23
Vermont.....	1	1	1	29	2	30
Virginia.....	3	365	2	35	5	400
Washington.....	8	2,522	4	649	12	3,171
West Virginia.....	7	5,517	7	5,517	14	11,034
Wisconsin.....	12	4,236	4	536	16	4,772

Housing Conditions

COMMUNITY ACTIVITIES IN PUBLIC HOUSING PROJECTS

EXPERIENCE of tenants of public housing projects in organizing community activities is described in a recent publication of the United States Housing Authority.¹ These tenants are occupants of buildings erected by the Public Works Administration, now under the management of the USHA. Group activities covered are: Resident councils and tenant associations; resident newspapers; preschool and parent education; health and safety; consumer services; mutual benefit organizations; library and reading rooms; and recreation.

Preschool Programs

Policies of tenant selection followed by the Federal Government have stressed the importance of serving families with a number of small children. It is estimated that there are 54 children of preschool age for every 100 families in housing projects. This fact partially accounts for the tenants' keen interest in developing supervised programs for the preschool child. Education for the parents is also an integral part of nursery or play-school work.

Of 13 nursery schools in operation when the study under review was made, 8 were conducted by the Work Projects Administration and 5 by private local agencies. In one project where the nursery school could enroll only a small percentage of the children, approximately 150 mothers volunteered to take turns supervising 4 outdoor play areas for 2 hours in the mornings. A toy-loan library was established for another group of over 300 children. More than 500 toys were cataloged for circulation among children whose parents would sign applications.

Planning the preschool work "is one of the finest examples of tenant initiative combined with the use of trained personnel. Many extremely difficult problems had to be solved before the programs could be started." Financing caused real concern but agency resources were pooled in many cases to bring the cost per family to the lowest

¹ Federal Works Agency. United States Housing Authority. Management Experience Notes No. 1: Community Activities in Public Housing. Washington, 1941.

possible level. Similarly, resourcefulness was required to obtain trained leadership at low cost to residents and at no cost to the projects. Both public and private agencies have contributed.

Health and Safety

Health programs cited include that of the Jane Addams Health Committee of Chicago. The committee was formed in August 1938 to deal with a whooping-cough epidemic, and was made permanent as its value became recognized. Its first step was to call attention to the free medical facilities in the city and to urge use of these services. An infant welfare station was established in the project. Research has been carried on dealing with group-health plans operating in the United States in the hope of agreeing on a practical plan.

The Parklawn Tenants Association of Milwaukee organized a special committee to solicit group memberships for the Milwaukee Medical Center. After 3 years approximately 80 of the 518 families in the project had joined, at a cost of \$3 a month for a family. Services included are examinations, hospitalization, and home and office calls.

Smithfield Courts tenants at Birmingham organized a health club which joined the organized antituberculosis campaign in the city. A house-to-house survey in the 540-family project resulted in examination of over 300 children at the community center, with referral for X-ray examination in many cases.

Consumer Efforts

Many residents have found they could raise living standards at no added cost. Buying clubs, cooperatives, and credit unions have been organized. A group of 38 Techwood Homes residents in Atlanta, ordering eggs, butter, vegetables, chickens, and other foods through a buying club, received an annual dividend for 1938 of over 23 percent.

Comparatively small but active credit unions, chartered under Federal or State law, were found in almost two-thirds of the housing projects. Many members saving as little as 25 cents weekly took advantage of the loan features of the plan to buy furniture, pay rent, and take care of emergency situations. The Jane Addams project's credit union of 250 members accumulated \$2,000 in 8 months and loaned half as much again.

Various homemaking programs have developed in a majority of the projects, to encourage more intelligent use of family income. This work was stimulated in the early stages of project operations by many local housing authorities. Cooperation of local agencies was obtained in establishing home-demonstration units for display purposes. Meal planning and service were taught, as well as furniture arrangement and sewing.

Security and Welfare Activities

Organizations were formed in several projects to assist tenants in paying their rent in periods of unemployment, illness, or when other emergencies arise. At old Harbor Village, Boston, as of December 1939, the Men's Club reported distribution of \$1,400 to 60 families, of which \$200 was repayable. The money was raised by benefit performances. Another method used is for the tenants to establish separate accounts with the management for deposit of extra rental sums, which are held in reserve for rent payments during periods of unemployment.

A job exchange service is carried on by residents of Julia C. Lathrop Homes at Chicago. Tenants learning of vacancies at their places of employment report them to the exchange. Management staffs have also kept residents informed on existing employment exchanges.

Welfare bodies in projects have supplemented the services of public and private agencies. Tenants of public projects have worked with their neighbors outside to advance the city welfare programs.

Libraries and Recreation

Careful planning, to ascertain the needs of various age groups, preceded initiation of library services. New facilities were added only if existing neighborhood resources were insufficient. At University Homes, Atlanta, the library had a circulation of 13,708 in 1939. Of the total, 55 percent represented books for juveniles.

Recreation commonly includes outdoor and indoor games and sports, the arts, general-purpose and special-interest clubs, parties, and special events. Activities requiring special and expensive equipment are unusual, but exist in some instances. Popular programs include ball games, bowling, and table tennis; gardening contests; choral groups; workshops; various kinds of plays; boxing exhibitions; and game nights.

Twenty-six tenant newspapers have appeared in the last 3 years, ranging from 2 to 20 pages. They are usually mimeographed and issued weekly or monthly. A large amount of work is involved and the greatest problem is to obtain sufficient volunteer assistance. Paid advertising has been depended on for raising revenue. However, local merchants are not likely to need to advertise as their shops become known to tenants. Therefore, it appears that regular subscribers will be sought or that the general treasuries of tenants' associations will be drawn upon.

Resident Bodies

Resident councils and tenant associations have proved useful in planning and initiating tenant activities. Methods of organization vary, and bodies have been created on the initiative of tenants, man-

agement, or both. Block or area representation has been adopted in many projects. Sometimes representatives are chosen by a general election. Organization has required time. Activities have also differed widely. Some bodies deal with recreation, others with traffic problems. Problems related to the development and nature of community activities and current management are also discussed at monthly meetings.

Prevailing approaches to the relationship of management to tenant bodies are indirect stimulation, direct action, a "hands off" policy, and assistance on special request. In spite of some failures, experience in 3 years of operation, according to the report, has shown the value of tenants' associations.

Social Insurance

UNEMPLOYMENT-COMPENSATION OPERATIONS, OCTOBER 1941 ¹

Summary

BOTH unemployment-compensation payments and continued claims established new lows in October 1941, for the third successive month. Benefit recipients were fewer than in any month of 1940 or 1941, the only years for which comparable data are available. Benefits totaled \$21,400,000, and continued claims numbered 2,500,000; and a minimum of 486,000 workers received checks for benefits. Claims, payments, and the number of recipients were about one-third below the October 1940 level and 60 percent or more under June 1940 when the Nation's defense program was initiated. The continued drop in benefit payments brought total disbursements for the first 10 months of 1941 to \$296,800,000; this was \$162,900,000, or 35 percent, less than payments during the corresponding period of 1940. The increase in initial claims received in central offices, however, suggests that benefit payments may rise during the next few months as workers are temporarily displaced by the shift from nondefense to defense production and by labor disputes which may cause lay-offs in other plants.

Workers received compensation in October for 1,781,000 weeks of total unemployment, and for 211,000 weeks of partial and part-total unemployment. Partial unemployment represents less than full-time employment with the employer-employee relationship maintained, while part-total unemployment is a period of otherwise total unemployment during which an individual has odd jobs or subsidiary work. The number of weeks of total unemployment compensated for was approximately 7 percent below September, the previous record low. However, the number of compensated weeks of partial and part-total unemployment, which has been increasing since August, rose 8 percent. It is expected that underemployment will be a growing problem as curtailment orders, shortages of materials, delayed deliveries, and the conversion of nondefense plants to defense production cause restriction of hours or reduced employment in some industries.

¹ Prepared by Research and Statistics Division, Bureau of Employment Security, Social Security Board.

Benefit Payments

Despite the reduction in total benefit disbursements, 24 jurisdictions, including such important centers of defense activity as California, Connecticut, Indiana, Kansas, Massachusetts, Pennsylvania, and Washington, paid more benefits in October than in the preceding month. Except in Indiana and Kansas, however, disbursements in the noted States were lower than in October 1940, decreases ranging from 13 to 58 percent. In four States—Indiana, Kansas, Louisiana, and New Jersey—the actual amount of benefit disbursements was higher than in October 1940. Only the District of Columbia and Louisiana, however, paid more benefits during the first 10 months of 1941 than in the corresponding period of 1940.

Increases in benefit payments were chiefly due to continued unemployment of workers who had reached compensable status after seasonal lay-offs, and to transitional unemployment occurring in September and the early part of October. In Indiana, increased disbursements resulted largely from priorities unemployment in Evansville, lay-off of automobile workers in South Bend when a strike in Cleveland cut off the supply of steel frames, and the tapering off of construction work in many parts of the State. Other Indiana communities faced with critical unemployment conditions were Anderson, Kokomo, Muncie, New Castle, Plymouth, and Washington. In California, many small employers are laying off men because they cannot secure scrap iron, steel, and other metals. In Maine, the principal cause for the increase in benefit disbursements in October over the previous month was the seasonal curtailment of employment in the women's shoe industry; in New Hampshire, the cause was the closing of the resort season. Payments to displaced silk workers contributed to the increases in New Jersey and Pennsylvania, and seasonal curtailment of canning operations accounted for the rise in Hawaii. At this time in 1940, large-scale construction projects were under way in Kansas and Louisiana; no such level of employment was maintained in 1941.

Average Number of Claimants

The average weekly number of benefit recipients declined 13 percent from September to 430,000, approximately 268,000 fewer than in October of last year, and the lowest average weekly total for any month for which data are available. In the last week of October only 451,000 claimants were receiving unemployment benefits, 241,000 fewer than in the corresponding week of 1940.

Claims Received

Continued claims averaged 555,800 weekly—8 percent under the previous record low of September 1941 and 320,400 or 37 percent less than in October 1940. After dropping to 547,000 in the week ended October 11 (the lowest weekly number on record), the number of persons filing claims for all types of unemployment rose to 552,300 in the week ended October 18, and to 569,900 in the following week. Although fewer continued claims were filed in October than in any month since all States began paying benefits, 29 States reported larger volumes of claim receipts than in the preceding month. Marked increases occurred in Delaware (32 percent), Hawaii (78 percent), Indiana (30 percent), Maine (25 percent), and New Hampshire (34 percent). Important centers of defense activity with increases in continued claims this month, beside Indiana, were California, Connecticut, Kansas, Missouri, New Jersey, New York, Washington, and Wisconsin. Increases in claim receipts in these States reflect the same factors as those responsible for the increases in benefit disbursements.

Continued Unemployment Compensation Claims Received, Weeks Compensated, and Benefits Paid, by State, October 1941

[Data reported by State agencies, corrected to Nov. 24, 1941]

Social Security Board region and State	Continued claims ¹			Weeks compensated			
	Number	Type		Number	Type of unemployment		
		Waiting period	Compensable		Total	Partial and part-total combined ²	Partial only ³
Total.....	2,547,673	518,470	2,029,203	1,991,970	1,781,110	210,860	134,263
Region I:							
Connecticut.....	26,820	4,434	22,386	19,565	16,690	2,875	2,785
Maine.....	15,713	3,277	12,436	12,198	8,746	3,452	2,989
Massachusetts.....	133,720	28,622	105,098	118,060	106,938	11,122	10,464
New Hampshire.....	13,387	4,600	8,787	8,857	6,799	2,058	1,998
Rhode Island.....	27,250	2,795	24,455	24,455	22,334	2,121	(⁶)
Vermont.....	2,346	627	1,719	1,704	1,585	119	83
Region II:							
New York.....	413,279	95,523	317,756	318,696	318,696	(²)	(²)
Region III:							
Delaware.....	4,634	419	4,215	4,181	2,998	1,183	1,102
New Jersey.....	154,246	28,717	125,529	115,988	95,335	20,653	20,354
Pennsylvania.....	188,809	63,277	125,532	124,632	124,632	(⁹)	(²)
Region IV:							
District of Columbia.....	12,973	2,080	10,893	10,549	10,076	473	91
Maryland.....	33,130	2,104	31,026	29,930	25,064	4,866	4,777
North Carolina.....	54,395	7,206	47,189	45,811	42,346	3,465	2,864
Virginia.....	24,104	3,895	20,209	20,101	19,181	920	461
West Virginia.....	20,231	2,412	17,819	19,049	12,019	7,030	6,919
Region V:							
Kentucky.....	12,303	1,876	10,427	20,854	17,802	3,052	1,406
Michigan.....	112,518	19,893	92,625	103,138	89,767	13,371	12,313
Ohio.....	190,156	29,033	161,123	65,264	59,246	6,018	4,331
Region VI:							
Illinois.....	157,324	14,639	142,685	144,535	111,306	33,229	21,533
Indiana.....	58,065	12,576	45,489	45,421	35,960	9,464	(⁶)
Wisconsin.....	25,829	8,264	17,565	16,734	13,665	3,069	2,069
Region VII:							
Alabama.....	39,570	10,146	29,424	28,799	26,761	2,038	398
Florida.....	67,441	8,161	59,280	61,715	54,851	6,864	(⁶)
Georgia.....	47,478	14,381	33,097	32,603	31,191	1,412	655
Mississippi.....	16,909	2,915	13,994	13,202	12,795	497	168
South Carolina.....	28,835	4,966	23,869	20,847	18,937	1,910	566
Tennessee.....	61,585	4,893	56,692	43,393	41,736	1,657	300
Region VIII:							
Iowa.....	14,917	5,131	9,786	9,841	8,420	1,421	433
Minnesota.....	32,095	6,364	25,731	24,934	21,336	3,598	2,189
Nebraska.....	8,343	2,042	6,301	6,121	5,596	525	197
North Dakota.....	1,756	379	1,377	1,199	1,042	157	79
South Dakota.....	1,853	363	1,490	1,445	1,339	106	(⁶)
Region IX:							
Arkansas.....	16,568	2,442	14,126	14,126	13,500	626	204
Kansas.....	18,771	4,067	14,704	14,695	13,264	1,431	523
Missouri.....	67,591	20,636	46,955	46,615	36,342	10,273	9,670
Oklahoma.....	21,148	3,385	17,763	16,039	14,189	1,850	130
Region X:							
Louisiana.....	84,735	20,972	63,763	60,804	57,483	3,321	976
New Mexico.....	4,834	522	4,312	3,939	3,723	216	47
Texas.....	71,112	10,125	60,987	43,034	37,504	5,530	95
Region XI:							
Arizona.....	6,948	897	6,051	5,897	5,614	283	18
Colorado.....	11,517	2,288	9,229	8,078	7,437	641	275
Idaho.....	3,491	802	2,689	2,983	2,804	179	13
Montana.....	8,695	1,958	6,737	6,042	6,042	(⁹)	(²)
Utah.....	11,601	823	10,778	10,857	9,958	899	245
Wyoming.....	1,779	633	1,146	1,087	950	137	23
Region XII:							
California.....	265,851	41,544	224,307	216,548	184,717	31,831	17,438
Nevada.....	3,131	424	2,707	2,302	2,153	149	70
Oregon.....	10,598	2,540	8,058	6,615	5,392	1,223	582
Washington.....	22,252	7,214	15,038	15,036	12,309	2,727	1,641
Territories:							
Alaska.....	1,222	493	819	737	714	23	0
Hawaii.....	3,515	785	2,730	2,622	1,826	796	789

See footnotes at end of table.

Continued Unemployment Compensation Claims Received, Weeks Compensated, and Benefits Paid, by State, October 1941—Continued

[Data reported by State agencies, corrected to Nov. 24, 1941]

Social Security Board region and State	Benefits paid ⁴				Month and year benefits first payable	Amount of benefits since first payable ⁵
	Amount ³	Type of unemployment				
		Total	Partial and part-total combined ²	Partial only ¹		
Total.....	\$21, 430, 134	\$19, 911, 848	\$1, 498, 995	\$904, 894		\$1, 640, 027, 778
Region I:						
Connecticut.....	208, 582	189, 018	19, 271	18, 572	Jan. 1938.....	24, 662, 782
Maine.....	87, 829	66, 363	21, 466	18, 563	do.....	12, 307, 131
Massachusetts.....	1, 181, 516	1, 119, 561	60, 955	56, 735	do.....	93, 089, 116
New Hampshire.....	66, 483	56, 296	10, 187	9, 749	do.....	7, 454, 591
Rhode Island.....	259, 478	248, 226	11, 252	(⁶)	do.....	26, 005, 625
Vermont.....	13, 738	13, 040	545	300	do.....	2, 728, 621
Region II:						
New York.....	3, 718, 007	3, 718, 007	(⁷)	(⁷)	do.....	325, 285, 897
Region III:						
Delaware.....	37, 725	30, 222	7, 494	6, 920	Jan. 1939.....	2, 003, 505
New Jersey.....	1, 311, 290	1, 170, 483	139, 377	136, 795	do.....	42, 911, 880
Pennsylvania.....	1, 348, 424	1, 348, 424	(⁷)	(⁷)	Jan. 1938.....	191, 342, 006
Region IV:						
Dist. of Columbia.....	126, 741	121, 440	5, 028	925	do.....	7, 063, 971
Maryland.....	339, 601	303, 070	35, 301	34, 559	do.....	26, 780, 950
North Carolina.....	316, 784	302, 861	13, 679	10, 424	do.....	20, 047, 053
Virginia.....	159, 275	153, 934	5, 010	2, 152	do.....	18, 594, 494
West Virginia.....	170, 999	121, 458	49, 541	48, 820	do.....	22, 871, 077
Region V:						
Kentucky.....	150, 987	137, 563	12, 923	5, 855	Jan. 1939.....	11, 899, 323
Michigan.....	1, 270, 220	1, 152, 633	117, 587	107, 495	July 1938.....	116, 936, 171
Ohio.....	613, 308	580, 551	31, 198	21, 167	Jan. 1939.....	58, 558, 912
Region VI:						
Illinois.....	1, 687, 274	1, 442, 798	238, 438	139, 737	July 1939.....	84, 315, 796
Indiana.....	515, 721	445, 366	70, 147	(⁶)	April 1938.....	40, 479, 579
Wisconsin.....	176, 090	152, 538	23, 552	15, 192	July 1936.....	21, 905, 608
Region VII:						
Alabama.....	209, 348	197, 476	11, 791	2, 088	Jan. 1938.....	19, 823, 994
Florida.....	583, 190	536, 290	46, 900	(⁶)	Jan. 1939.....	14, 605, 881
Georgia.....	253, 231	245, 247	7, 984	3, 992	do.....	10, 141, 574
Mississippi.....	112, 385	109, 315	3, 045	1, 010	Apr. 1938.....	6, 472, 978
South Carolina.....	153, 716	143, 674	10, 018	2, 768	July 1938.....	6, 576, 657
Tennessee.....	372, 992	362, 244	10, 748	1, 664	Jan. 1938.....	20, 804, 327
Region VIII:						
Iowa.....	84, 875	76, 469	8, 299	2, 448	July 1938.....	14, 132, 085
Minnesota.....	270, 874	240, 807	30, 067	18, 230	Jan. 1938.....	31, 721, 427
Nebraska.....	54, 387	50, 567	3, 810	1, 363	Jan. 1939.....	4, 295, 269
North Dakota.....	10, 555	9, 525	1, 030	493	do.....	1, 637, 586
South Dakota.....	11, 661	11, 027	634	(⁶)	do.....	1, 062, 920
Region IX:						
Arkansas.....	100, 044	96, 341	3, 703	1, 052	do.....	6, 820, 559
Kansas.....	146, 737	136, 349	10, 388	3, 410	do.....	5, 828, 861
Missouri.....	412, 670	364, 580	47, 919	43, 106	do.....	17, 022, 248
Oklahoma.....	171, 924	158, 105	13, 819	824	Dec. 1938.....	10, 231, 266
Region X:						
Louisiana.....	605, 034	577, 698	26, 147	6, 993	Jan. 1938.....	22, 691, 854
New Mexico.....	35, 935	34, 131	1, 768	332	Dec. 1938.....	3, 142, 927
Texas.....	334, 311	306, 731	27, 346	501	Jan. 1938.....	34, 944, 361
Region XI:						
Arizona.....	66, 576	64, 143	2, 433	116	do.....	5, 452, 297
Colorado.....	79, 932	73, 553	4, 850	1, 956	Jan. 1939.....	9, 668, 190
Idaho.....	27, 314	25, 805	1, 426	84	Sept. 1938.....	5, 937, 596
Montana.....	63, 670	63, 670	(⁷)	(⁷)	July 1939.....	6, 263, 173
Utah.....	137, 154	128, 388	8, 766	1, 938	Jan. 1938.....	6, 080, 351
Wyoming.....	14, 386	13, 012	1, 374	149	Jan. 1939.....	2, 966, 492
Region XII:						
California.....	3, 030, 631	2, 727, 668	300, 427	151, 738	Jan. 1938.....	172, 405, 843
Nevada.....	29, 624	28, 288	1, 336	555	Jan. 1939.....	2, 680, 703
Oregon.....	81, 175	71, 467	9, 678	3, 963	Jan. 1938.....	16, 246, 072
Washington.....	188, 987	162, 048	26, 939	17, 069	Jan. 1939.....	20, 381, 616
Territories:						
Alaska.....	10, 264	10, 008	256	0	do.....	1, 142, 796
Hawaii.....	16, 480	13, 310	3, 149	3, 092	do.....	701, 887

¹ I. e. certification that the claimant has completed a waiting-period week or a compensable period.² Benefits for partial and part-total unemployment are not provided by State law in Montana, New York, and Pennsylvania.³ Includes supplemental payments, not classified by type of unemployment.⁴ Not adjusted for returned and voided benefit checks.⁵ Adjusted to exclude returned and voided benefit checks.⁶ Data for partial unemployment included with data for part-total unemployment.

Employment Services

PLACEMENT WORK OF PUBLIC EMPLOYMENT SERVICES, OCTOBER 1941¹

Summary

INSTEAD of the usual increase in placements which occurs between September and October, the number of jobs filled in October 1941 by the public employment service fell 1 percent, to 539,000. The number of placements, however, was second only to the record high of the previous month and was 32 percent above the same month of 1940. Although job applications rose 7 percent to 1,500,000, occasioned in part at least by the completion of defense construction projects and by priorities unemployment, the active file continued to show a decrease. The 4,200,000 persons registered for work in October is the smallest number on record.

The public employment services filled 4,600,000 jobs and placed 3,100,000 different individuals in the first 10 months of 1941; in the same period of 1940, 3,000,000 jobs were filled and 1,900,000 individuals were placed.

In the 16 States which are centers of defense activity, about two-thirds more placements were made during the first 10 months of 1941 than of 1940. In all other States combined, only a third more jobs were filled in January-October 1941 than in the same period of 1940.

Placements

Despite the reduction in the national total, 20 jurisdictions, including such important defense centers as California, Illinois, Kansas, Michigan, Missouri, and Virginia, made more placements in October than in the preceding month. Increases ranged from 1 percent in Illinois to 46 percent in New Mexico. The gains in Louisiana and New Mexico were due to the hiring of workers for the sugarcane and the cotton and broom-corn harvests, respectively. In most of the other States, in addition to the needs of defense industries, the continuing demand for construction, cannery, and food-processing workers was an important factor contributing to the larger numbers of placements. Smaller placement volumes, on the other hand, reflect in many instances seasonal curtailment in certain industries.

¹ Prepared by Research and Statistics Division, Bureau of Employment Security, Social Security Board.

In all but eight States more jobs were filled in October 1941 than in the same month of 1940. The States showing reductions—Arizona, Arkansas, Colorado, Delaware, Florida, Louisiana, Mississippi, and Vermont—were, in most cases, the States which were in the fall of 1940 hiring large numbers of workers for the construction of Army cantonments and for other defense activities. The 48-percent reduction in complete placements from October 1940 reported by Colorado was largely the result of a change in reporting procedure; for 1940 complete placements included temporary agricultural placements which are now reported as supplementary placements.

Approximately 358,000 jobs were filled by men in October—about twice as many as the 181,000 filled by women. Placements of men were 35 percent more numerous than in October 1940, while placements of women were 27 percent higher. Only Arizona, Arkansas, Colorado, Delaware, and Vermont showed declines from October 1940 in placements of both sex groups. Reductions, as compared with October 1940, in placements of men alone occurred in the District of Columbia, Florida, Louisiana, Mississippi, and North Carolina, and for women alone in Hawaii, Iowa, Minnesota, Nebraska, and South Dakota. In Delaware, the District of Columbia, and New Jersey, where placements of women in domestic service are especially important, more women than men were placed in October 1941.

Active File of Registrants

With an ever-increasing volume of employment opportunities available to qualified workers, the number of job seekers registered for work on October 31, 1941, declined for the fifth successive month. Eight percent fewer registrants were actively seeking work than on October 31, 1940.

Fewer job seekers were registered for work than in October 1940 in 35 States. The largest reductions, ranging from 40 to 70 percent, were reported by Connecticut, Hawaii, Maryland, Montana, Nevada, Ohio, Vermont, and Washington. Significant increases, on the other hand, were reported in most of the South Central, Southeast, and Gulf States, and in Indiana. In Arkansas, the active file was $2\frac{1}{2}$ times as large as in October 1940, mainly as a result of registrations filed in anticipation of employment on defense projects. Except in Texas and Indiana, where no periods of validity for the active file are set, the increases are chiefly due to completion of defense projects which had been under way in October of last year.

At the end of October 1941, the active file of men numbered over 2,900,000, and of women, more than 1,300,000. Based on comparable data, the number of male job seekers registered for work was 12 percent lower, but the number of woman registrants was 2 percent higher than on October 31, 1940. Male registrants were less numerous

than on October 31, 1940, in 36 States and woman registrants were fewer in 29 States.

Applications Received

The number of applications for work received in October rose for the first time since June 1941. The 1,500,000 applications filed with State employment offices in October were 6.5 percent more numerous than in the preceding month and 7 percent higher than in the corresponding month of 1940. Much of the increase over October 1940 is due to the fact that more women are being attracted to the labor market. The 987,000 applications for work filed by men were only 2 percent higher than in October 1940, but the 501,000 applications filed by women represented an increase of 18 percent.

For the country as a whole, new applications received in employment offices represented 46 percent of all registrations. In 14 jurisdictions, however, the proportion of new to total applications was considerably higher than the Nation-wide average. In these States—mainly situated in the Southeast, Southwest, and Pacific coast areas, and the Territories—one-half to two-thirds of the total applications filed in October 1941 were new. In most of these areas thousands of workers applied for jobs at plants engaged in defense production and registered with the public employment service for the first time.

TABLE 1.—*Summary of Placement Activities of Public Employment Services, October 1941*
[Data reported by State agencies, corrected to Nov. 24, 1941]

Activity	Number	Percent of change from—		
		September 1941	October 1940	October 1939
Total complete placements.....	539,001	-1.2	+32.3	+47.2
Regular.....	341,757	-1.8	+47.3	+71.5
Temporary.....	197,244	-.1	+12.4	+18.2
Supplementary placements.....	395,570	-29.6	+24.6	+248.9
Total applications.....	1,487,603	+6.5	+6.9	+11.9
Active file.....	4,241,918	-2.6	¹ -8.3	¹ -22.5

¹ Based on comparable data; excludes Idaho.

TABLE 2.—*Summary of Placement Activities for Veterans, October 1941*
[Data reported by State agencies, corrected to Nov. 24, 1941]

Activity	Number	Percentage of change from—		
		September 1941	October 1940	October 1939
Total complete placements.....	17,893	-1.2	+21.9	+31.2
Regular.....	10,131	-.8	(¹)	(¹)
Temporary.....	7,762	-1.6	(¹)	(¹)
Total applications.....	48,480	+3.6	-10.5	+2.6
Active file.....	173,623	² -5.4	³ -14.7	³ -22.8

¹ Total veteran placements by duration not reported prior to 1941.

² Based on comparable data; excludes New York.

³ Based on comparable data; excludes Idaho.

TABLE 3.—Activities of Public Employment Services, All Registrants, by State, October 1941

[Data reported by State agencies, corrected to Nov. 24, 1941]

Social Security Board region and State	Complete placements						Supplementary placements	Total applications received		Active file as of Oct. 31, 1941	
	October 1941				January-October 1941			Number	Percent of change from September 1941	Number	Percent of change from Oct. 31, 1940
	Number	Percent of change from—		Regular (over 1 month)	Number	Percent of change from January-October 1940					
		September 1941	October 1940								
Total.....	539,001	-1.2	+32.3	341,757	4,591,233	+51.0	395,570	1,487,603	+6.5	4,241,918	+8.3
Region I:											
Conn.....	9,095	-1.3	+11.5	6,223	86,816	+59.3	10	21,192	-2.7	30,531	-49.5
Maine.....	5,090	-3.3	+154.0	3,987	39,450	+103.3	0	11,307	+17.8	20,634	-21.8
Mass.....	9,328	-9.6	+58.9	7,302	88,747	+119.0	15	56,826	+8.4	125,882	-5.8
N. H.....	2,312	-21.3	+9.4	1,707	22,273	+11.7	33	6,704	+12.8	10,769	-35.3
R. I.....	2,024	-7.0	+50.5	1,641	20,803	+158.0	1	9,090	+9.8	26,879	-17.0
Vt.....	1,345	-19.6	-4.5	769	11,859	+24.5	168	2,693	+16.0	5,996	-50.9
Region II:											
N. Y.....	55,555	-11.4	+45.9	30,868	467,539	+72.4	895	169,161	+11.4	405,799	-14.6
Region III:											
Del.....	1,498	-23.4	-21.5	634	15,065	+26.2	49	2,580	-15.2	6,622	-30.1
N. J.....	17,663	-1.2	+41.6	10,617	157,561	+65.9	2	56,149	+14.2	153,783	-21.2
Pa.....	24,123	-9	+43.4	17,901	199,137	+56.4	2,080	103,575	+9.3	265,445	-14.4
Region IV:											
D. C.....	5,948	+4.6	+14.9	2,851	53,245	+37.2	4	12,633	+16.9	19,630	-27.8
Md.....	6,120	-8.4	+15.9	4,310	61,715	+58.5	67	23,125	-3.4	29,806	-44.1
N. C.....	13,435	-12.4	+5.0	9,047	161,000	+127.8	6,624	32,888	+1.2	89,749	+15.1
Va.....	10,498	+3.6	+23.8	7,706	109,578	+91.6	142	24,228	+14.3	47,759	+7.8
W. Va.....	5,030	+5.3	+31.0	3,429	39,563	+46.1	315	14,904	+4.6	48,948	-19.2
Region V:											
Ky.....	4,189	-3.9	+23.6	3,058	39,727	+49.4	119	19,628	+5.5	75,344	-16.5
Mich.....	16,144	+7.1	+11.4	10,521	141,525	+28.9	414	57,625	-1.2	125,619	-39.2
Ohio.....	28,637	-4.1	+53.2	16,674	245,349	+64.4	355	67,091	+8.0	201,845	-40.2
Region VI:											
Ill.....	22,527	+1.2	+37.6	14,334	213,392	+59.8	1,639	75,594	-8.6	174,365	+6
Ind.....	13,455	-9.0	+21.6	8,885	127,927	+62.5	543	36,737	+6.9	227,248	+65.8
Wis.....	10,253	-15.0	+25.6	5,775	98,526	+45.9	396	25,544	+3.5	72,062	-25.8
Region VII:											
Ala.....	6,101	-4.6	+48.3	4,647	55,931	+28.4	551	25,034	-4.1	85,435	-9.3
Fla.....	7,292	+23.7	-8.6	5,581	59,966	+67.6	164	20,942	+14.9	104,825	+41.1
Ga.....	13,177	+10.6	+44.6	9,738	101,109	+22.0	240	40,677	+21.9	97,179	-33.8
Miss.....	7,185	-28.2	-17.5	5,764	59,445	+35.8	1,439	29,445	+10.8	79,929	+16.6
S. C.....	7,135	-4.3	+78.0	5,484	74,876	+150.6	287	23,263	+17.4	63,655	+59.5
Tenn.....	11,086	+3.7	+63.5	8,121	88,250	+71.7	164,914	21,328	+16.4	123,164	+17.1
Region VIII:											
Iowa.....	10,622	+6.0	+32.0	6,515	82,335	+24.8	672	19,047	+13.6	54,029	-17.5
Minn.....	10,382	+6.6	+34.1	4,774	80,277	+31.0	294	29,514	+3.4	73,905	-28.2
Nebr.....	4,748	-4	+4.7	2,346	36,041	+22.4	231	8,509	+6.9	43,015	+13.4
N. Dak.....	6,494	-6.8	+45.7	1,292	44,597	+21.0	640	8,116	-6.0	20,823	-7.2
S. Dak.....	2,160	-11.8	+7.9	919	18,449	+21.1	2,862	5,378	+1.8	16,906	-18.0
Region IX:											
Ark.....	9,070	+14.5	-26.5	7,315	69,164	+31.6	14,854	22,109	-6.3	95,691	+150.8
Kans.....	9,766	+11.6	+83.3	5,021	73,564	+77.6	508	20,028	-5.7	60,492	+15.5
Mo.....	21,020	+28.0	+104.3	16,411	151,226	+90.5	2,795	52,659	-2.3	193,212	+36.6
Okla.....	5,563	-9.4	+42.0	2,602	45,211	-9.9	9,541	21,469	+17.0	90,207	+72.3
Region X:											
La.....	7,554	+8.8	-11.9	5,527	62,786	+62.7	3,063	23,752	+8.9	122,234	+14.2
N. Mex.....	5,828	+45.6	+40.1	1,435	22,425	+38.7	8,059	4,031	+16.9	25,301	-10.3
Tex.....	37,763	-5.3	+9.4	22,631	336,610	+17.4	103,897	65,695	-3.8	281,019	+39.4
Region XI:											
Ariz.....	2,414	-3.8	-6.8	1,468	25,425	-3.3	8,494	5,037	+19.8	15,832	-16.6
Colo.....	4,018	-22.4	-48.3	2,413	42,237	-22.5	6,217	10,497	-5.7	42,957	-14.3
Idaho.....	4,462	-7.8	+12.6	4,096	33,065	+23.6	7,021	3,805	+6.7	19,590	(2)
Mont.....	2,945	+4.1	+29.1	1,799	24,552	+26.9	1,174	5,154	-5.3	9,240	-44.8
Utah.....	3,927	-1.4	+97.5	1,901	25,395	+70.9	505	10,767	+24.0	15,219	-34.7
Wyo.....	1,690	-31.4	+23.6	1,018	16,499	+63.5	136	2,150	-15.6	4,324	-14.4
Region XII:											
Calif.....	47,565	+6.8	+71.0	28,281	354,652	+64.3	16,242	131,950	+17.5	282,643	-24.9
Nev.....	1,885	-10.5	+87.6	1,037	18,333	+63.4	69	3,071	+2.5	3,390	-40.2
Oreg.....	13,031	+9.8	+97.8	9,264	93,614	+80.3	14,870	17,222	+7.9	21,370	-33.8
Wash.....	7,887	+4.2	+28.4	4,511	75,134	-4.3	11,934	24,123	+5.6	27,225	-69.8
Territories:											
Alaska.....	932	-13.5	+76.2	638	9,313	+58.7	19	1,415	-3.4	959	-24.9
Hawaii.....	1,021	+25.3	+9.3	909	9,955	+13.3	7	2,142	-8.2	3,433	-61.0

1 Based on comparable data; excludes Idaho.

2 Data not comparable.

TABLE 4.—Activities of Public Employment Service for Veterans, by State, October 1941

[Data reported by State agencies, corrected to Nov. 24, 1941]

Social Security Board region and State	Complete placements			Total applications received	Active file as of Oct. 31, 1941		
	Number	Percent of change from—1			Number	Percent of change from—1	
		September 1941	October 1940			Sept. 30, 1941	Oct. 31, 1940
Total.....	17,893	-1.2	+21.9	48,480	173,623	² -5.4	³ -14.7
Region I:							
Connecticut.....	309	-9.6	-6.1	644	915	-20.8	-67.0
Maine.....	206	+27.2	+123.9	448	947	+11.4	-32.1
Massachusetts.....	242	-26.7	+105.1	1,803	7,700	-17.6	+69.4
New Hampshire.....	101	+7.4	+3.1	216	492	+4.9	-20.1
Rhode Island.....	50	-13.8		198	762	-10.9	+2.0
Vermont.....	67	+11.7	-6.9	75	216	-8.9	-65.6
Region II:							
New York.....	1,305	-7.7	+62.3	2,567	9,994	(⁴)	-26.7
Region III:							
Delaware.....	37			78	231	-18.4	-28.7
New Jersey.....	346	+3.6	+44.8	1,408	5,045	-2.0	-22.2
Pennsylvania.....	541	-2.2	+23.3	3,862	10,117	-2.9	-22.0
Region IV:							
District of Columbia.....	203	+6.8	+5	549	1,000	-1.5	-36.7
Maryland.....	191	-1.5	0	762	1,219	-3.8	-42.5
North Carolina.....	249	-15.0	-14.7	643	2,621	-6.8	+18.3
Virginia.....	191	-1.5	-22.4	531	1,007	+6.8	-11.9
West Virginia.....	111	+5.7	+50.0	483	2,435	-11.6	-28.7
Region V:							
Kentucky.....	110	-14.1	-6.0	573	3,129	-8.6	-21.0
Michigan.....	759	+9.7	+33.4	2,588	7,358	+2	-10.8
Ohio.....	1,243	+6.5	+91.8	2,869	9,401	-7.6	-49.0
Region VI:							
Illinois.....	764	-2.9	+82.8	2,404	7,192	-10.0	-7.6
Indiana.....	356	-11.7	-15.0	1,002	10,068	+1.5	+61.7
Wisconsin.....	350	-16.5	+12.9	975	5,196	-4.6	-21.2
Region VII:							
Alabama.....	114	-20.8	+9	666	3,391	-11.3	-15.5
Florida.....	232	+21.5	+12.6	872	5,151	-3.2	+71.9
Georgia.....	290	0	+10.7	1,070	3,009	+9.7	-19.7
Mississippi.....	141	-31.9	-44.9	946	2,704	+6.2	+31.6
South Carolina.....	163	+17.3	+15.6	763	1,733	+30.9	+34.6
Tennessee.....	178	-57.9	-17.2	600	3,663	+9	-8.5
Region VIII:							
Iowa.....	655	+8	+15.9	710	2,937	-17.8	-30.8
Minnesota.....	509	+12.1	+69.7	1,371	4,397	-14.3	-28.8
Nebraska.....	292	-14.4	+55.3	331	2,230	-1.4	-3.0
North Dakota.....	150	-5.7	+25.0	129	888	-5.1	-9.8
South Dakota.....	99	+30.3	+25.3	213	1,012	+8.1	-8.1
Region IX:							
Arkansas.....	506	+33.5	-14.5	877	4,047	-8.2	+118.8
Kansas.....	461	+5.5	+106.7	749	3,327	-9.1	+2.6
Missouri.....	978	+39.5	+112.6	1,887	7,849	-10.2	+16.1
Oklahoma.....	205	-12.0	+3.5	828	5,007	-13.1	+50.6
Region X:							
Louisiana.....	137	-2.1	-45.2	592	3,789	-1.3	+13.9
New Mexico.....	170	+51.8	+63.5	123	1,433	-3.4	-7.6
Texas.....	906	-3.7	-31.2	1,310	7,524	-14.6	+18.2
Region XI:							
Arizona.....	123	-18.0	-3.9	244	1,016	+3.5	-16.6
Colorado.....	136	-32.0	-50.2	439	1,812	-4.0	-16.1
Idaho.....	276	-6.4	-11.8	164	1,164	-9.5	(⁵)
Montana.....	163	+1.9	-10.9	265	625	-7.3	-41.8
Utah.....	137	-7.4	+128.3	305	553	-1.1	-51.4
Wyoming.....	65	-62.8	+16.1	129	291	+20.3	-7.6
Region XII:							
California.....	2,114	+4.4	+41.7	6,067	13,786	+1.2	-39.1
Nevada.....	121	+6.1	+13.1	158	214	+41.7	-29.1
Oregon.....	468	+2.0	+27.9	688	1,309	+4.5	-45.8
Washington.....	313	-6.0	+6.1	1,208	1,559	+3.4	-70.3
Territories:							
Alaska.....	48			67	35		
Hawaii.....	12			31	123	-7.5	-67.0

¹ Computed only for States reporting 50 or more in both months.² Based on comparable data; excludes New York.³ Based on comparable data; excludes Idaho.⁴ Data not reported for September.⁵ Data not comparable.

Cooperation

TNEC STATEMENT ON CONSUMERS' COOPERATIVES

THE present position and future possibilities of consumers' cooperation in the United States as an aid to consumers are touched upon briefly in the final report of the Temporary National Economic Committee,¹ as follows:

Government Aid for Consumers

"Consumers are assisted by whatever government does to keep open the channels of trade, to promote conditions in which a larger and better supply of goods regularly comes to market, and at prices which permit consumers to purchase them. They are directly assisted by what government may do to keep harmful products off the market, or to bring more information to consumers about commodities. They may find indirect assistance also in government information that would interpret to them the current controls and conditions in industry which determine the quantity and value of its output.

"Because consumers transact their business almost entirely on an individual basis, they possess unequal bargaining power with other economic units, most of which are organized and are steadily extending the scope and power of their organization. Consumers generally would not desire to reverse that trend, since most of them probably take part in some form of organized action in their income-earning capacity. But in their income-spending activities for the most part they work alone, and therefore rely upon such assistance as government may offer to make their bargaining power more nearly equal.

"There are exceptions to this. In slowly but steadily increasing numbers consumers are associating themselves with cooperative enterprise in the distribution, and to a more limited extent production, of goods under their own control. In so doing they acquire a collective-bargaining power which may eventually win them some measure of equality with other organized groups. In that event they may not look to government to even things up. It is a cardinal point in the cooperative philosophy that government assistance be avoided lest it

¹ Temporary National Economic Committee. Final Report on the Concentration of Economic Power in the United States, p. 328. (77th Cong., 1st sess.)

invite interference or weaken the self-reliance of the cooperative program.

"Cooperative expansion, however, if it is to be sound and is to remain subject to consumer control, in fact as well as in principle, will be slow. Today it probably accounts for not more than 2 percent of all retail sales of commodities, much of which is accounted for by supplies for farm operation. The commodity areas in which, during its period of new growth, it finds satisfactory conditions for successful operation are still limited, although they embrace a sizable proportion of the normal family's budget. The population groups which it is presently reaching are restricted. Only a small fraction of all American consumers have yet come into direct contact with a going cooperative enterprise that is prepared to serve their needs, and many of these people have not yet shared in a cooperative undertaking.

"Yet the demonstration which cooperatives have already given of their ability to serve consumers effectively is not to be overlooked. In supplying accurate information for the guidance of consumer selection they are not yet doing all that is possible, but they are doing it more thoroughly than any but the most exceptional noncooperative enterprise. Furthermore, they have shown by their handling of some farm supplies and some forms of insurance that they can effect major savings for consumers in direct competition with established industries. Such savings are most striking where the distributing cooperatives reach back into production and supply themselves with their own products. Such expansion of operations goes forward steadily.

"Consumers' cooperation may prove to be the one sound answer to the consumer demand for an abundance of sound products priced for use, and for reliable information about commodities. But it will not be an early solution of all consumers' problems, nor will it obviate the need for government aid. Even the strongest consumers' cooperatives find on occasion that they require attention of government, either by way of assistance to themselves comparable to the assistance given to competing forms of enterprise or by way of remedial action against competitors who seek to exclude them from the common channels of trade. Furthermore, they will need the assistance of government and others in devising standards for giving useful information to their members about the goods they handle.

"In ways other than cooperative enterprise consumers are beginning to organize to serve themselves and to express their demands. Through their own testing and rating agencies they are getting facts about the utility and performance of identified commodities. Education in home economics, which for many years has concentrated on training the individual consumer to make such use as she can of the information available to her in the market place, gives rise now to an organized effort to increase the supply and accuracy of such information. Three

national women's organizations work regularly with representatives of manufacturing and trade for the voluntary adoption of informative labels and for the definition of commodity standards as a basis for more useful information. They have drafted a formal platform of their objectives in these fields. Other consumer organizations, local in scope, work on specific problems confronting consumers in their markets. Most striking in this field are those which participate actively in State or Federal hearings for the fixing of milk prices, and others which have organized tenants to voice collective protests and demands on rent scales and housing conditions. Finally there is a beginning of formal collective bargaining by consumers with respect to the prices they pay, similar to the bargaining of labor unions on wages and working conditions. This has appeared so far only in agreements on prices to be paid for milk and milk products by two local consumer committees of several hundred families each, bargaining collectively with distributors.

"The vast majority of consumers, however, lack organization for better bargaining and self-protection. They also occupy an isolated position in the expanding field of collaboration between government and industry. More and more, government is being called upon to take part in the operating details of the economy, usually on behalf of a producer interest concerned primarily with the security of its income or its investment. New steps are being taken by government for consumers, too, but they scarcely classify on the same level as the vigorous and expensive programs undertaken in response to producer pressures. The aid which government renders to producer groups solves some problems for them, but may create new ones for consumers. This possibility gives additional ground for recognition by government of the special problems which arise in the consumer phase of the lives of people whose government it is."



COOPERATIVE COLD-STORAGE PLANTS

COLD-STORAGE lockers, a development of the past few years, are discussed in an article in the July 1941 issue of *News for Farmer Cooperatives*.¹ Farmers are the chief patrons of the plants providing these facilities, forming 75 percent of the total patrons in a survey made by the Cooperative Research and Service Division of the Farm Credit Administration in 1940. Two-thirds of the 1,160 plants reporting were in towns of less than 5,000. Approximately 14 percent were owned and operated cooperatively.

In these plants the patrons rent individual lockers, storing in them meat, fruits, and vegetables for household use. The spread of rural

¹ Issued by U. S. Farm Credit Administration, Washington, D. C.

electrification has greatly increased refrigeration facilities on the farms. However, even on farms with electrical refrigeration, the storage space thus provided is insufficient to accommodate the meat from a whole animal or a winter's supply of frozen fruits and vegetables. Most of the cold-storage plants also "provide facilities to chill, cut, grind, wrap, and sharp freeze meat products, and in addition many of the modern plants are equipped to cure and smoke meats, render lard, dress poultry, slaughter livestock, and package fruits and vegetables."

Of 234 cooperatively owned plants for which reports were received in a survey in March 1941, 28 had been started in 1936 or earlier, 48 in 1937, 49 in 1938, 57 in 1939, 45 in 1940, and 7 in the first 3 months of 1941. The 182 plants reporting as to capacity had an average of 351 lockers each, of which 70 percent were rented at the time of the survey.² It appeared that the cooperative plants were somewhat more successful in renting their lockers than were the privately owned plants.

Only 27 percent of all the plants reporting in March 1941 were operated as separate organizations, whereas 56 percent were departments of creamery, milk, or poultry plants, and 17 percent were departments of other types of enterprises.

The records of the Bureau of Labor Statistics indicate that during the past 2 or 3 years an increasing number of distributive cooperative associations have added to their other business a cold-storage department.



FARMERS' USE OF COOPERATIVES

IN 1939, of all the 6,096,799 farms in the United States, 1,364,402 (22.4 percent) were doing business with cooperatives, according to a recent report by the Bureau of the Census.³ Farm products were marketed through cooperatives by 13.6 percent of all farms, farm and household supplies were purchased from cooperatives by 12.2 percent, and some kind of service was bought through cooperatives by 11.7 percent.

In the Middle Atlantic, East and West North Central, and Pacific divisions, more than 30 percent of all farmers were doing business with cooperatives. Cooperative purchasing of supplies was most prevalent in the West North Central and Pacific States, where over one-fifth of the farmers used cooperatives for this purpose; purchase of service of various kinds was also most common in these two regions and in the East North Central Division.

² The article points out that "with the usual rental and service charges a properly constructed and properly managed locker plant of 300 lockers or over is profitable when 62 percent of the capacity is rented."

³ U. S. Bureau of the Census. Agriculture: Federal Census Reports on Farmer Business through Cooperatives—United States summary. (Sixteenth Census of the United States, 1940, Series Agr. U. S.—2 No. 8.)

Among the individual States, South Carolina showed the least development (3.9 percent) of cooperative dealings among farm operators. At the other end of the scale was Minnesota with 66.0 percent. Cooperative purchasing of farm supplies was most prevalent in Minnesota (45.5 percent) but in 10 other States (Idaho, Iowa, Montana, Nebraska, New York, North Dakota, Oregon, South Dakota, Washington, and Wisconsin) more than one-fifth of the farmers were buying through cooperatives. Use of services provided by cooperative means was not so common, but in five States (Illinois, Indiana, Iowa, Minnesota, and Wisconsin) over one-fifth of the farmers participated.

Compared with 1929, the use of cooperative purchasing facilities—all States combined—increased more markedly than that of cooperative marketing facilities. Whereas the proportion of farmers selling their products through cooperative marketing associations increased from 11.0 percent in 1929 to 13.6 percent in 1939, the corresponding percentages for cooperative purchasing were 6.5 and 12.2. As 1939 was the first year in which data were obtained as to use of cooperative service, no comparison with 1929 is possible on that point.

The proportions of farm operators using cooperative purchasing associations increased during the 10-year period in all but two States (Alabama and New Hampshire).

Data for individual States on extent of farmers' participation in cooperative activities are given in the accompanying table.

Extent of Use of Cooperatives Among Farmers in the United States, 1929 and 1939

Geographic division and State	Farms reporting any business with co-operatives		Percent purchasing through co-operatives		Percent receiving service through co-operatives, 1939
	Number, 1939	Percent of all farms	1939	1929	
United States.....	1,364,402	22.4	12.2	6.5	11.7
New England.....	27,823	20.6	11.3	8.7	7.1
Middle Atlantic.....	105,256	30.2	16.3	8.6	13.1
East North Central.....	351,539	34.9	19.7	11.9	20.8
West North Central.....	428,648	39.3	25.6	14.4	19.9
South Atlantic.....	96,437	9.5	3.8	1.5	5.5
East South Central.....	89,766	8.8	2.5	1.5	4.8
West South Central.....	102,155	10.6	3.8	1.7	6.4
Mountain.....	61,123	26.2	14.4	5.1	10.7
Pacific.....	101,655	36.8	21.2	11.9	14.0
Alabama.....	16,222	7.0	2.7	3.0	3.8
Arizona.....	2,780	15.1	8.0	1.3	4.6
Arkansas.....	11,470	5.3	1.7	1.0	3.2
California.....	47,851	36.1	17.6	11.0	13.5
Colorado.....	11,623	22.6	11.8	5.6	11.3
Connecticut.....	5,113	24.2	14.9	11.1	5.4
Delaware.....	1,241	13.8	6.2	1.9	6.9
District of Columbia.....	1	1.5			
Florida.....	6,678	10.7	5.5	2.8	4.1
Georgia.....	18,201	8.4	1.2	.7	7.0
Idaho.....	18,901	43.3	23.5	5.2	16.9
Illinois.....	70,296	32.9	17.0	7.9	23.7

Extent of Use of Cooperatives Among Farmers in the United States, 1929 and 1939—Con.

Geographic division and State	Farms reporting any business with co-operatives		Percent purchasing through co-operatives		Percent receiving service through co-operatives, 1939
	Number, 1939	Percent of all farms	1939	1929	
Indiana.....	58,184	31.5	17.0	10.3	20.1
Iowa.....	96,639	45.3	28.3	15.4	26.4
Kansas.....	44,604	28.5	19.0	10.8	13.8
Kentucky.....	28,076	11.1	2.5	.5	5.6
Louisiana.....	14,303	9.5	4.4	4.3	3.8
Maine.....	4,827	12.4	5.3	4.3	5.6
Maryland.....	8,599	20.4	13.2	7.8	8.0
Massachusetts.....	5,610	17.6	12.0	11.3	5.0
Michigan.....	61,199	32.6	18.9	17.0	19.3
Minnesota.....	130,261	66.0	45.5	21.4	31.5
Mississippi.....	23,384	8.0	2.8	1.3	4.1
Missouri.....	58,170	22.7	13.6	12.5	13.4
Montana.....	14,063	33.6	22.4	6.4	13.4
Nebraska.....	44,938	37.1	23.7	11.7	16.9
Nevada.....	735	20.6	6.0	3.9	11.0
New Hampshire.....	3,209	19.4	10.2	11.0	6.8
New Jersey.....	8,491	32.9	16.6	7.5	9.6
New Mexico.....	2,357	6.9	3.2	1.8	3.3
New York.....	61,088	39.9	22.4	12.5	17.0
North Carolina.....	17,862	6.4	2.1	.8	4.2
North Dakota.....	29,412	39.8	25.8	14.2	18.2
Ohio.....	71,599	30.6	17.8	12.2	17.7
Oklahoma.....	28,541	15.9	7.5	2.6	8.3
Oregon.....	22,402	36.2	21.9	8.2	13.3
Pennsylvania.....	35,677	21.1	10.7	5.2	10.0
Rhode Island.....	350	11.6	6.1	4.5	3.9
South Carolina.....	5,381	3.9	.8	.4	2.4
South Dakota.....	24,624	34.0	23.5	13.4	12.9
Tennessee.....	22,084	8.9	2.0	1.2	5.9
Texas.....	47,841	11.4	3.1	.7	8.1
Utah.....	6,940	27.3	14.0	8.4	7.9
Vermont.....	8,714	37.0	18.3	10.6	14.7
Virginia.....	29,725	17.0	9.0	2.3	8.9
Washington.....	31,402	38.4	26.5	16.8	15.3
West Virginia.....	8,749	8.8	4.1	2.7	3.9
Wisconsin.....	90,261	48.3	28.9	13.4	23.7
Wyoming.....	3,724	24.8	10.8	3.6	11.7

COOPERATIVE MOVEMENT IN SOUTH AFRICA ¹

CONSUMERS' cooperation forms only a small part of the cooperative movement in the Union of South Africa. Of 242 active associations on June 30, 1940, only 38 were consumers' cooperatives. Their membership formed only about 27 percent of the total cooperative membership, and their business in 1938-39 was less than 5 percent of the total business done by cooperative associations in that year.

Nevertheless they are growing at a faster rate than the agricultural cooperatives. From June 30, 1935, to the same date in 1940 the total number of agricultural cooperatives declined from 362 to 204. This

¹ Data are from Horace Plunkett Foundation, Year Book of Agricultural Cooperation, 1940 and 1941, London, P. S. King & Son, Ltd., 1940 and 1941; and International Labor Office, Cooperative Information (Geneva) No. 13, 1939.

loss was due to the dissolution or reorganization of associations with unlimited liability, for during the same period agricultural associations with limited liability rose from 148 to 169. During the same 6-year period the number of consumers' cooperatives increased from 13 to 38. Whereas agricultural cooperatives showed an increase of 33 percent in membership, consumers' cooperatives increased the number of their members by over 160 percent.

The accompanying table shows the development of consumers' and agricultural cooperatives from 1935 to 1940.

Number and Membership of Cooperative Associations in Union of South Africa, 1935 to 1940

June 30—	Number of associations			Number of members		
	Total	Consumers' cooperatives	Agricultural cooperatives	Total	Consumers' cooperatives	Agricultural cooperatives
1935.....	375	13	362	86,316	13,473	72,843
1936.....	272	16	256	84,815	14,696	70,119
1937.....	236	25	211	91,692	16,376	75,316
1938.....	235	28	207	105,468	23,732	81,736
1939.....	239	37	202	120,483	31,559	88,924
1940.....	242	38	204	131,831	35,183	96,648

The number of active associations of specified types, as of June 30, 1940, is shown in the following statement:

	Number
All types.....	242
Agricultural associations.....	204
Marketing.....	140
Manufacturing.....	40
Purchase of supplies.....	10
Service.....	9
Cooperative farms.....	2
Crop insurance.....	3
Consumers' associations.....	38
Distributive.....	36
Credit and trading.....	2

The year 1938-39 showed an increase of about £430,000 ² in the net worth of the cooperative associations, this having risen to £4,305,440, of which the consumers' associations accounted for £282,170. Total assets amounted to £9,681,779, the consumers' associations having £1,273,254.

The total cooperative business declined from £21,763,865 in 1937-38 to £20,644,725 in 1938-39. This was the result of a decline of £1,688,465 in the marketing business of the agricultural cooperatives.

² Average exchange rate of South African pound in 1939=\$4.40.

The other types of cooperative business showed an increase. The business in the various lines in 1938-39 is shown below:

All types of associations.....	£20, 644, 725
<hr/>	
Agricultural associations.....	19, 545, 791
Marketing.....	17, 481, 969
Purchase of supplies.....	1, 946, 008
Services.....	117, 814
Consumers' associations.....	1, 098, 934
Distributive.....	1, 014, 358
Services.....	84, 576

Legal Status of Cooperatives

Cooperative associations in the Union of South Africa operate under Act No. 29 of 1939, effective September 1, 1939. That act amended and consolidated previous legislation. It is of interest in that the act contains several unusual, as well as several doubtfully cooperative features.

Thus, it authorizes the formation of "farmers' special cooperative companies," some of whose dealing may be "speculative." Unlike other farmers' organizations they may deal with nonmembers and accept nonfarmers as members, but may distribute their "profits" only among the members. They are required to pay income tax on the income derived from their nonmember business; this feature, it is stated, has been difficult to carry out and "has caused a measure of dissatisfaction."

Associations with limited liability are allowed to grant up to four extra votes to members, those above the first being based upon the patronage given to the association. This, according to the report, is to allow the large producer to have "a larger say in the control of his company."

The pledging of the growing crops of the members to the association as security for debts to the association is permitted and extended from previous legislation. Such "chattel mortgages", however, have to be authorized by amendment to the bylaws of the individual association. At the end of the first year's experience with this provision it appeared that "the chattel-mortgage principle does not afford an entirely satisfactory solution to the problems."

Cooperatives and the War

Marketing-control schemes have had an effect on cooperative associations. Some have had to venture into new fields in order to continue in business. Others—especially central organizations—"have had to amend their constitutions and even to surrender some cooperative principle or practice in order to adapt their business operations to

those of control boards. On the whole, however, it cannot be said that cooperation has sustained any serious loss of prestige or business, particularly since the [control] boards are not designed to eliminate or restrict cooperative activity and seem themselves determined to use the cooperative machinery in the achievement of their aims. Cooperative organizations are also well represented on the various boards of control."

As yet, societies do not appear to have given special consideration to the solving of post-war problems, but some leaders in the movement are of opinion that, because of its moderate social character, cooperation will be called upon to play an important role in post-war economy.

Cooperation Among the Natives

Cooperatives of various kinds—credit unions or people's banks, stores, and agricultural associations—were started several years ago for the benefit of the natives. This movement, according to a report of the International Labor Office,³ had a promising start, but by 1939 was showing "signs of collapse for lack of proper guidance."

Four of the five native stores had survived and there were in the Transkeian Territories about 30 badly needed cooperative credit societies with an approximate combined membership of 3,000. However, the native cooperative movement was hampered by the inexperience and ignorance of the natives and their lack of realization of the importance of good management and proper accounting. Another factor was the "organized opposition of European traders."

The 1941 Yearbook of Agricultural Cooperation notes a quickening of interest in cooperation, among the natives. It states that a commission was appointed to look into their needs and special problems in the field of cooperation. Because of the war, however, the inquiry was postponed indefinitely.

³ Cooperative Information No. 13, 1939.

Labor Conferences

TRADES AND LABOR CONGRESS OF CANADA, 1941

A PAID-UP membership of 144,592 was reported to the 1941 meeting of the Trades and Labor Congress of Canada, held at Calgary, Alberta, September 22-27. This was an increase of 11,890¹ over the figure reported to the 1940 convention.

The executive council pointed out labor's primary duty in the war "to exert every effort to assure victory and that it is better to accept, as may be from time to time, the temporary setting aside of such rights and privileges as we have previously enjoyed than to risk losing all." On the other hand, the council warned the delegates always to be on guard against exploitation and conditions imposed under the guise of war requirements for which there is no genuine justification.

With reference to various resolutions regarding P. C. 7440—the order concerning Canada's wartime wages policy—the committee on resolutions recommended that "the executive council, together with our representatives on the National Labor Supply Council, be instructed to seek the enforcement of the order in council in accord with its original intention, and that boards of conciliation should operate without any interpretations, instructions or interference from any members of the Crown or departments of Government and that the approval of the National Labor Supply Council shall be secured before any amendments are made or its extension to any other branch of industry."

Included in the resolutions adopted by the congress were the following recommendations or declarations:

Appointment of a direct representative of organized labor to the Wartime Industries Control Board.

That before any orders in council affecting labor are passed, the representatives of labor be consulted and such legislation submitted for their approval or advice.

To widen the scope of Provincial compensation laws, so that workers who are incapacitated through having to work under inclement weather conditions will be compensated by law.

Reiterating the congress stand regarding old-age pensions (1) that the age limit be reduced to 65 years; (2) that the amount of the pension be increased; (3)

¹ The Canadian Labor Gazette (Ottawa), October 1941, p. 1239.

that a contributory retirement scheme be incorporated in the Old-Age Pensions Act; and (4) where the practice of combining the Parents' Maintenance Act with the Old-Age Pensions Act prevails, it be discontinued.

Enactment of pension legislation similar to that of the Railroad Retirement Act now in force in the United States.

Changing the Mothers' Allowance Act so that all widows shall receive a pension.

That, on the termination of present conflict members of the armed forces be retained on the Government pay roll until they can secure, or are provided with, steady employment.

That it be made compulsory for an employer to recognize and deal with a trade-union of his employees if there is one organized.

Enactment of Dominion legislation similar to that contained in the Wagner Act of the United States.

Appointment of a Board of Conciliation without first having to take a strike vote.

Restoration of the Industrial Disputes Investigation Act "to its former usefulness."

Opposition to the use of troops in labor disputes and reaffirming the right of labor to organize, bargain collectively, and strike if necessary.

Payment of the same benefits to dependents of merchant seamen, attached to the Merchant Marine for the duration of the war, as are paid to dependents of those in His Majesty's forces.

That the cost-of-living bonus be extended to all workmen throughout the Dominion, and that the cost-of-living index be not measured by the Dominion as a whole but by Provinces or zones.

That the Wartime Prices and Trade Board adopt a more vigorous attitude in the protection of consumers of Canada by controlling more effectively the rising cost of food and clothing and prohibit war profiteering.

Establishment of diplomatic relations between the Federal Government and the U. S. S. R. and negotiation of a trade agreement enabling the Russian people to get the necessary equipment to destroy the common enemy.

Support for the farmers to secure adequate debt protection and parity of farm prices.

Mr. Tom Moore was reelected president of the congress, and Winnipeg was selected as the 1942 convention city.

Labor Laws and Court Decisions

WAGE AND HOUR LAW OF HAWAII

SINCE the passage of the Federal Fair Labor Standards Act in 1938, efforts have been made to secure the enactment of similar legislation by the States and Territories. Numerous bills modeled on the Federal statute have been introduced in the State legislatures, but none has been enacted by a State. However, on October 18, 1941, a law was adopted by the Territory of Hawaii which resembles the Federal act in several respects.

Like the Federal act, the Hawaiian law contains a declaration of policy. This policy is to establish minimum-wage and maximum-hour standards at levels consistent with the public health, efficiency, and general well-being of workers; to safeguard existing minimum-wage and maximum-hour standards; and to increase employment opportunities. Unlike the Federal law, however, there is no provision for industry committees to establish higher wages than those specified in the law. The minimum wage is lower and the maximum hours are longer than those provided under the Federal act. A number of industries are specifically exempted.

Administration.—The act is administered by the Director of Labor and Industrial Relations, but for administrative purposes there is created a wage and hour division under the supervision of the assistant in charge of the Bureau of Law Enforcement.

Minimum wages.—Effective April 1, 1942, every employer subject to the act must pay to each employee not less than 20 cents an hour in the counties of Hawaii, Maui, and Kauai, and not less than 25 cents in the city and county of Honolulu.

The Director of Labor may provide for the employment of learners, apprentices, and persons impaired by age or physical or mental deficiency or injury, at such wages lower than the applicable minimum wage as the Commission of Labor and Industrial Relations may prescribe.

Maximum hours.—The maximum hours permitted by the law are fixed at 48 a week, unless the employee receives compensation for employment in excess of such weekly hours at a rate not less than one and one-half times the regular rate at which he is employed. These provisions will become effective April 1, 1942.

Exemptions.—The act does not apply to an individual employed at a guaranteed monthly salary of \$150 or more, or to persons employed in agriculture, in domestic service in a private home, or by certain relatives. In addition, the law does not cover persons employed in a bona fide executive, administrative, supervisory, or professional capacity, or in the capacity of outside salesman or collector. It also does not apply to persons engaged in the fishing industry, to seamen, or to persons employed by a street, suburban, or interurban electric railway, local trolley, or motorbus carrier. Persons who are already covered by the Federal Fair Labor Standards Act are exempt from the Territorial act.

Regulations under act.—Every employer is required to keep a record of the name, address, and occupation of each employee, the amount paid to him each pay period, the hours worked, and such other information as the Commission of Labor and Industrial Relations may prescribe. In addition, the commission is authorized to make such rules and regulations as are necessary to carry out the provisions of the act. These rules and regulations may include the restriction or prohibition of industrial home work and, when necessary to prevent the reduction of wages, may restrict or prohibit overtime employment. The commission may also provide for reasonable deductions from the minimum wage for board, lodging, or other similar services furnished by an employer to his employees.

Collective bargaining.—Nothing in the act shall be deemed to interfere with, impede, or diminish the right of employees to bargain collectively through representatives of their own choosing in order to establish wages in excess of the minimum established by the law, or to establish hours of work less than the established maximum.

Violations.—Any employer willfully violating any provision of the act or any rule or regulation issued in accordance with its provisions is subject to a fine of not more than \$500 or imprisonment for not more than 90 days, or both. Each day a violation continues constitutes a separate offense. It is also unlawful for an employer to discharge or discriminate against an employee because he files a complaint or testifies in a proceeding under the act.

Any employer violating the wage and hour provisions of the act shall be liable to the employee affected in the amount of his unpaid minimum wages or his unpaid overtime compensation, and, in addition, except in the case of a bona-fide disagreement as to the amount of overtime, an equal amount as liquidated damages. The employee may maintain an action to recover the amount due and is entitled to reasonable attorney's fees and court costs. The Director of Labor may take an assignment from an employee and bring an action for the recovery of the amount due the employee. The Director may also bring an action to enjoin an employer from violating the act.

COURT DECISIONS OF INTEREST TO LABOR

California Antimigrant Law Unconstitutional

THE Supreme Court of the United States has declared unconstitutional the antimigrant law of California.¹ This law, generally known as the "anti-Oakie" law, made it a misdemeanor for anyone to assist an indigent person of another State to enter California. Similar statutes have been passed in approximately 27 other States.

The constitutionality of the law was contested by Fred F. Edwards of Marysville, Calif., who had been convicted of transporting his unemployed brother-in-law from Texas to Marysville. The Superior Court of Yuba County upheld the conviction, stating that the law was a valid exercise of the police power of the State.

In his first written decision following appointment to the Supreme Court, Mr. Justice Byrnes declared that the conviction could not be sustained, since the enactment of such a law was not a right of the State because it imposed an unconstitutional burden on interstate commerce. Much of the opinion was based on the principle that relief and interstate migration are a national problem. While acknowledging that the continuous movement of large segments of our population had given rise "to urgent demands upon the ingenuity of government," Mr. Justice Byrnes declared that no single State could isolate itself "from difficulties common to all of them by restraining the transportation of persons and property across its borders."

The Court as a whole agreed with the majority decision. However, four justices believed that the law should have been considered as an infringement on the rights of national citizenship rather than a burden on interstate commerce. Mr. Justice Jackson advanced this viewpoint particularly and announced that in considering the present case the Court should "hold squarely that it is a privilege of citizenship of the United States, protected from State abridgement, to enter any State of the Union, either for temporary sojourn or for the establishment of permanent residence." In support of this view, Mr. Justice Douglas likewise delivered a separate opinion, in which he was joined by Mr. Justice Black and Mr. Justice Murphy.

Rights of Individual Employee Under Collective-Bargaining Agreement

The Supreme Court of Kansas has held that an agreement between an employer and a union does not create a right to continuous employment for the life of the agreement so as to permit an employee to maintain an action for loss of wages resulting from his discharge.²

¹ *Edwards v. California* (62 Sup. Ct. 164).

² *Swart v. Huston* (117 Pac. (2d) 576).

The high court of the State pointed out that a collective-bargaining agreement between an employer and a union outlines the general conditions under which the business shall be conducted in respect to wages, hours of labor, working conditions, and matters incidental thereto. Ordinarily, collective bargaining does not of itself make a contract of employment between the employer and an individual workman which either can enforce, or which will furnish the basis for an action for damages upon breaching. In this case also there was nothing in the collective-bargaining agreement which bound the employee to work for his employer for any definite length of time. The court, therefore, held that in the absence of a contract between the employee and his employer covering the duration of the employment, no action against the employer for discharging the employee from service could be maintained.

Assignment of Future Wages

A North Carolina statute to restrict the assignment of an employee's future wages has been upheld by the State supreme court as a valid exercise of the legislative power.³ The statute prohibits the assignment of wages to be earned in the future unless the assignment is accepted in writing by the employer. It was enacted, the court said, to restrict the sale or assignment of wages to be earned in the future for a substantial commission.

In holding the act constitutional, the court declared that freedom to contract is a qualified and not an absolute right, and, further, that the guaranty of liberty does not withdraw the right of legislative supervision or the power to provide restrictive safeguards and reasonable regulations. Further, the legislative power to impose reasonable restrictions upon the right of contract, deemed conducive to the public good, particularly as to contracts growing out of the relationship of employer and employee, has been upheld by the courts in numerous cases. For these reasons, the court concluded the statute does not contravene any constitutional inhibition and hence is a valid exercise of legislative power.

Special Occupational-Disease Schedule Held Valid

A provision of the Ohio Workmen's Compensation Act containing a special compensation schedule for silicosis has been held valid by the State supreme court, even though under the schedule the maximum death award for silicosis is lower than that for other occupational diseases and accidental injuries.⁴ The court held that the establishment of such a special schedule was not an unreasonable and arbitrary classification.

³ *Morris v. Holshouser* (17 S. E. (2d) 115).

⁴ *Lourin v. Industrial Commission of Ohio* (37 N. E. (2d) 595).

The Ohio act, which covers all occupational diseases, also lists 22 specific diseases, including silicosis, as being compensable. In the special schedule for compensating injuries resulting from exposure to silica dust, the amounts vary according to the number of months of exposure. The establishment of such a schedule, the court held, was not arbitrary, even though this special schedule denied to a silicosis claimant certain rights belonging to claimants for other diseases. The court regarded these differentiations as clearly matters of policy for the legislature to determine, and further observed that the court cannot grant rights which the legislature has failed to give.

Lead Poisoning Held Accidental Injury

In a case decided recently by the Supreme Court of Oklahoma, lead poisoning contracted as a result of exposure to lead paint discharged by a spray gun was held to be compensable under the State act as an "accidental injury."⁵ The court ruled that the injury to the employee was sufficiently certain and definite in point of time to constitute an accidental injury.

The evidence showed that the employee, engaged in painting a bridge, experienced some discomfort. At his request the employer furnished him a respirator, but it was only partially effective because of its age and condition. The employee worked with lead and aluminum paint for several days, following which he required medical attention. According to the testimony of his physician, the employee suffered from an acute attack of lead poisoning, believed to be caused by exposure to vaporized paint. The State Industrial Commission awarded temporary total disability on the ground that the employee had become disabled as a result of an accidental personal injury caused by lead poisoning.

In sustaining the award, the court agreed that the authority of the Industrial Commission to award compensation in any case is limited to a disability which results from an accidental injury, and, further, that such authority does not extend to disabilities resulting from an occupational disease. However, the court reasoned that an accidental injury may result from the inhalation of vapor, gas, or dust, and the controlling factor in such a case is whether the injury occurred at a definite time and place and as a result of a short exposure rather than as a natural consequence of the employment over a long period of time. Measured by this rule, the court decided the evidence supported the finding of accidental injury, and the award for temporary disability was sustained.

⁵ *C. H. Howard & Co. v. McKay* (117 Pac. (2d) 525).

REGULATIONS REGARDING CIVIL-SERVICE EMPLOYEES IN FRANCE ¹

A LAW was passed in France, on September 14, 1941, establishing employment regulations in the French civil service and State establishments, with the exception of those which, prior to July 15, 1940, constituted a military personnel, and for which special laws have maintained their former status.

Civil servants are defined as permanent employees on rolls organized under the law of September 14, 1941, in a public service which is neither industrial nor commercial, or in a public State establishment; those who hold managerial positions in industrial or commercial public services, and the members of the same services when they are subject to the rules applicable to such services; and those who, in exceptional cases, are employed on contract by the Government on work which is neither industrial nor commercial.

General principles governing these services, set forth by the law, provide that public-service employees are subject to present and future regulations without recourse to pretended rights established by previous laws. Employees are required, in the service as well as in private life, to uphold the dignity of the State. The regulations in each administration may, in the interest of the service, require the authorization of the Secretary of State for the marriage of employees. The employee may not take part in any manifestation having a purpose foreign to his work, and even outside of his working hours he may not be associated in any activity which would be incompatible with the maintenance of existing institutions.

Employees are required to remain 8 years in the State or other public services, and can be relieved of this obligation only by decision of the Secretary of State and because of ill health or urgent family reasons. The penalty for an employee's giving up work is loss of his pension contributions and payment of an amount equal to the salary he would have received during the remainder of his service period.

For 5 years after leaving public service an employee may not be employed in any private enterprise which has any relation to his former service, without the authorization of the Secretary of State. Infractions of this rule may bring suspension or revocation of the employee's pension.

Implicit obedience to superiors is required of employees in all ranks, but if any order given appears to involve an irregularity or could have serious consequences, a subordinate is expected to bring it to the attention of his superiors.

Any act by an employee which threatens the indispensable continuity of the public services is regarded as serious, and if it leads to

¹ Data are from *Journal Officiel de l'Etat Français (Vichy)*, October 1, 1941.

concerted action the employee is deprived of the guaranties provided by the law in disciplinary matters.

Employees are forbidden to follow any industrial or commercial profession, to take any private paid employment, or to do any private work for which they receive pay. This covers all valuation, consultation, or instruction, unless authorized by the chief, but it does not apply to the production of scientific, literary, or artistic works, although the employee's name on such works may not be followed by his official title without authorization.

No supervisor may bring any pressure to bear upon his employees to have them participate in any manner whatever in activities or propaganda which by their nature or their object are foreign to the duties of the employees towards the State.

Provisions Governing Employment

No one can be appointed to public employment who is not French, subject to the legal regulations relative to country of origin; who does not enjoy civic rights, account being taken of laws concerning the status of Jews and the special dispositions concerning natives who are not citizens; who does not satisfy the regulations regarding secret societies; who has not fulfilled the obligations of the laws regarding compulsory national service; who does not present guaranties of morality and good faith, and who does not fulfill the physical requirements as well as the other special conditions necessary for carrying out the work.

Women may be employed to the extent that their presence in an administration is justified by the interests of the service. Special laws and regulations for each branch of the service will fix the limits within which they may be employed.

Certain employments may be reserved to former soldiers who satisfy the requirements as to nationality and race.

Advancement in the service is based on seniority and the system of grades, but the regulations regarding seniority are modified for those having had military service, and the service period credited is increased for family responsibilities by 1 year for each child after the third, the increase being effective at the time of the birth of the child.

Disciplinary Measures

Disciplinary penalties which may be imposed upon employees are of two degrees. The first is a formal censure; the second imposes penalties ranging from discharge with the loss of pension rights to loss of the right to advancement, reduction to a lower grade, or temporary loss of employment for a period not to exceed 6 months (including loss of salary and all indemnities during the period). In

case of dismissal with loss of pension the employee cannot be reimbursed for his contributions to the pension system.

No penalty of the second degree may be imposed unless the employee has been fully informed as to the charges made against him, except in extreme cases when an employee may be suspended by the secretary of state or by his immediate chief who must report the action at once to the secretary of state.

Each administration is to have its own disciplinary council, including representatives of the personnel in each grade of the service. These representatives are to be chosen by lot at the beginning of each year in each grade, and in any case brought before the council, representatives of the grade to which the employee belongs must be included.

Hours of Work and Vacations

The working hours and vacation periods are fixed in each administrative department so as to secure the best use of the services of the personnel. Employees with families have priority of choice of their vacation periods. However, no employee can claim a vacation as a right.

Sick leave with full pay, in case of illness duly proved, may be granted for 3 months, and with half pay for another 3 months. Employees who are unable to resume work after having had sick leave for 6 months in a 12-month period, are put on the inactive list or are retired for disability, unless the sickness is due to one of the exceptional causes provided for in the law of April 14, 1924, or by a serious accident incurred in the line of duty, in which case the employee may receive full pay until he recovers or is retired. Longer leave may be granted in case of tuberculosis, mental ailments, etc. Women receive maternity leave in accordance with the laws on this subject.

A person put on the inactive list may receive half pay plus family allowances for 1 year if suffering from a temporary disability. At the end of this time he must either be reinstated, retired for disability, or, if not entitled to a pension, dismissed.

Employees may be put on the inactive list because of lack of work for not more than 1 year, and during this time they will receive the salaries paid for temporary disability.

The mothers of families may be put on the inactive list before completing the required 8 years of service, in order to raise their children. Women who leave the service to be married and those already married who wish to return to their homes but have not acquired the right to a pension may also be put on the inactive list.

Reinstatement may be refused or delayed in the interest of the service, but if reinstated an employee is required to accept the position offered him.

Remuneration of Employees

Employees receive an annual salary fixed according to the type of duties performed and the size of the family. The basic salary is fixed, for each grade, for an employee with two children. This basic salary is reduced by 5 percent for a man over 35 years of age who has only one child and by 15 percent for one who has no children. The salary is increased by 15 percent for employees with 3 children and 10 percent for each child after the third. In a household of Government employees, only the head of the family benefits by these provisions, the other spouse undergoes the reduction of 15 percent, regardless of age and the number of children. For a transitory period, the reduction from the basic salary may not bring the salary below that paid at the time this law was passed.

In addition to the family allowances employees may receive a residence bonus based on the cost of living in different localities and the family circumstances, and a bonus covering expenditures occasioned by the duties of the employee.

Professional Associations of Employees

Associations of employees must be registered with the prefecture of the Department in which their headquarters are located, together with a list of their officials, and at Paris with the State secretariat which transmits the documents to the secretary of state. The constitution of each organization must be approved by the competent secretary of state, unless it conforms to the model established by decree of the Council of State.

Such associations may be formed only among employees of the same administration belonging to the same staff or who have the same type of duties. Agents who participate directly in the exercise of power may not belong to such an association. The professional associations may use part of their resources for the welfare or assistance of their members.

Legally constituted associations have the right to appear in court and to defend the collective interests of their members; they also have the right to appear before the jurisdictions of the administrative order in regard to regulations concerning the status of the personnel, and can intervene in individual cases in which the solution of the question affects the interests of the group which they have the right to defend; and, finally, they may submit to the secretary of state of their administration any proposals for the improvement of the organization or of the functioning of the services of which they form the personnel.

A law of the same date extended to the employees of departmental and commercial public services the right to organize professionally under the same regulations as those for the State administrations.

Industrial Accidents

ACCIDENTS AND HEALTH IN BRITISH FACTORIES, 1940

THE annual report of the Chief Inspector of Factories for Great Britain for the year 1940¹ shows very serious increases in the number of accidents, chiefly in those industries and on those machines that are concerned with the war effort. It is stated that the experience of the year has shown that some valuable lessons of the last war, particularly in regard to the working of excessive hours, had been widely forgotten or were not yet sufficiently appreciated.

Industrial Accidents

There were 1,372 fatal and 230,607 nonfatal accidents in 1940—an increase of about 24 percent and 20 percent, respectively, over the figures for 1939. These increases are much larger than those for 1939 as compared with 1938, when the rise in accidents was 17 percent and 7 percent, respectively. Factory inspectors were generally agreed that the main cause of the rise in accidents was the increase in the number employed in the war effort, although there were indications that there was a relaxation of care in certain directions.

The extent to which the war effort influenced accident statistics is shown by the increases of 33 percent in engineering works, 47 percent in the making of machines, motor vehicles, etc., and 21 percent in chemicals. Shipbuilding has had a serious increase in accidents, particularly in fatal accidents, although the experience of one large shipbuilding yard employing over 11,000 persons, in which the accident rate was 0.66 per 100 employed in 1940 as compared with 0.75 in 1939 and 0.95 in 1938, shows that even war conditions need not send up the accident rate.

The increase of 56 percent in accidents on milling machines and 48 percent on power presses shows the effect of new and untrained labor. There was a decided increase in accidents on automatic lathes and drilling machines, which were largely manned by the unskilled or semiskilled labor which is coming into industry, and it was felt that

¹ Great Britain. Ministry of Labor and National Service, Annual Report of the Chief Inspector of Factories for the year 1940. London 1941. (Cmd. 6316.)

in the rush for war production these workers were not getting the training they should have. There was an increase, also, in accidents caused by unconfined hair and loose clothing.

There has been insufficient training of new labor, caused both by the scarcity of supervisory workers such as foremen, chargehands, and setters-up, on whom such training must depend, and by the overworking of such workers. Training of the workers not only prevents accidents, but also gets new workers into full production more quickly. In order to overcome the difficulty on the accident-prevention side as far as possible, a special educational campaign was started in October 1940 which was assisted by the Royal Society for the Prevention of Accidents, and by employers' federations, trade-unions, and the technical and general press.

It had been suggested that one cause for the accident increase was an increase of accident proneness in factories and areas which had been badly bombed. However, it could not be shown that there was any increase in accidents in such areas which could not be explained by other causes. It was true that there were increases caused by the physical results of enemy action, such as falls while repairing roofs or falls on damaged floors, but there was no evidence that any appreciable number of accidents was caused by nervousness occasioned by air raids.

Accidents to young persons increased during the year. There were 26,492 accidents to boys and 8,493 to girls, an increase of 18 percent and 11 percent, respectively. The increase is ascribed to the larger number of young persons employed in factories and the increase in the hours worked, thus increasing the hours of exposure to risk. Other factors were the employment of young persons in greater numbers on accident-producing machines and the lack of training and supervision already noted.

Physical Conditions in Factories

In the latter part of 1939 the hurried steps to black-out the factories upset the means of ventilation in many cases, particularly in factories working at night. During the year great progress was made in the installation of various types of ventilating systems, so that what seemed to be an almost insuperable difficulty has, it is stated, been largely overcome and in many cases factories are now more efficiently ventilated than they were in pre-war days.

The increase in night work and overtime and the partial blacking out of factories even in daytime has increased the time spent in working under artificial light. This has had the effect of aggravating the ill effects of bad lighting on workers already subject to the strain of working at high pressure for long hours. During the early part

of 1940 progress was made in the removal of permanent black-out and in most factories provision was made for the admission of at least some natural light. The movement to admit more natural light suffered a set-back later in the year, however, in those parts of the country where air raids developed on a serious scale, owing to the replacement of broken glass by opaque material. It is stated that the department is now faced with the necessity of deciding between the immediate demands of wartime expediency and what is known to be preferable both for output and well-being, with the result that usually a compromise is adopted based on the best that can be obtained in each individual case.

Civil Defense

The program of shelter construction in factory premises which was commenced in 1939 was completed in 1940. At first, shelter was made compulsory only in certain areas, with the shelters so situated that they could be occupied within 7 minutes. As the large-scale air attacks developed, however, it became apparent that these arrangements must be revised, as alarm periods were frequent and of long duration and threatened serious loss of production. As a result, a system of individual warnings by means of raid spotters stationed on the works themselves was adopted, and workers were urged to continue at work after the siren was sounded until they were warned by the spotters that danger was imminent. As this frequently left too little time to reach the shelters, emergency protection at or near the place of work had to be provided. These arrangements, which proved highly successful, were carried out by employers and workers without legal compulsion but with the help of special governmental committees. With the changing course of the war and the invasion of France and the Low Countries the idea of "vulnerable areas" largely disappeared, and late in the year the application of the shelter scheme was extended so that shelter provision became compulsory at all factories throughout the country in which over 50 persons were employed.

Under the Civil Defense Act of 1939 the training and equipping of air-raid prevention personnel in factories became a part of the duties of the factory inspectors. The fire-fighting squads in factories were the forerunners of the fire guards now required under the Fire Prevention (Business Premises) Order. In many instances factories subjected to severe incendiary-bomb attacks almost entirely escaped damage through the efficiency of the voluntary fire fighters.

Hours of Work

The regulation of hours of work in wartime was complicated in 1940 by the situation which developed from the fall of France and later in the summer by the beginning of systematic bombing. During the first 5 months of 1940 the regulation of the hours of work of women and young children was carried out under emergency orders for individual factories or permissions to work under a general order, which were granted only after an investigation in each case by the factory inspector had insured that reasonable arrangements of hours and rest periods were, so far as possible, observed.

This situation was changed, however, by the withdrawal of the Expeditionary Force from France with the consequent losses of material. Little attention was given during the next 2 months to formalities in connection with emergency orders. Although the inspectors, who were overwhelmed with inquiries and demands for help and advice in fixing schedules of hours, were able to do much to keep hours within reasonable limits, in some cases the weekly hours of men and women and even young persons were excessive. The situation was brought under control, however, after July and the hours of employment of protected persons and the hours authorized in individual cases were in general within the limits provided for in the General Emergency Order for Engineering and certain other classes of works, issued in the latter part of June. The tendency toward long hours of work and the 7-day week in the case of adult men, whose hours are not regulated, persisted, with the result that absenteeism increased and production declined. Several examples are given in the report of the improved attendance and output when hours were reduced to a more nearly normal level.

Adjustments in shifts were necessary as the result of the systematic bombing, in some cases the work was spread over a 7-day week in midwinter to allow the workmen to get home before the bombing got fairly under way. In other cases 2 day shifts between the hours of 6 a. m. and 10 or 11 p. m. were substituted for the day and night shift.

The hours of work of women and young persons over 16 employed in munitions or other important work during the latter part of 1940 were as follows: Of a total of 5,493 factories holding permissions to operate under the General Emergency Order, in 1,585 cases the total weekly hours varied between 48 and 54. In 1,027 factories the total was either 55 or 56 hours, and in 2,428 it was over 56 but not over 60. The maximum total weekly hours of young persons under 16 which have been allowed are 48. Slight variations of the schedules of hours allowed under the general order were permitted under individual orders for engineering and certain other classes of work.

It has been necessary to make adjustments of the hours of work of women and young persons in some cases in which they have taken the places of men who have been called to the forces or transferred to other work of national importance; night work and work on Sunday have been allowed in certain industries for these workers.

Health in Factories

Conditions prejudicial to health such as long hours, difficulties of transport to and from work, and actual attacks by the enemy either at home or at work made the year 1940 the most difficult ever experienced by British workers. In spite of these adverse circumstances, however, the senior medical inspector stated that he had found no evidence that in general the health of the industrial worker has materially suffered. There was no doubt, however, that regardless of any possible effect on the health of the workers which might have resulted if the long hours of work under abnormal conditions had been continued, production decreased and would have fallen still more if there had not been some relaxation.

Investigation of the possible effect of night employment or extended day employment on the health of young persons between the ages of 16 and 18 showed that the physical condition of night workers was somewhat higher than that of day workers. This was accounted for by the fact that the more robust youth were selected by foremen and shop managers. From the data it appeared, however, that the length of the working time was of more importance than whether the work was done at night or by day, in its effect upon health.

Health conditions in the factory are dependent to a large degree upon an adequate and well-balanced food supply and upon medical supervision. In spite of the difficulties in obtaining medical personnel, the medical services have been extended, as has also that of trained nurses. Extension of special training for industrial nurses and financial assistance to such nurses have been provided through governmental assistance.

The influence of war conditions is apparent in the report of cases of industrial diseases and poisoning occurring during the year. Poisoning from TNT, which had been infrequent since the last war, was again being reported. The number of cases of aniline poisoning was far in excess of any previous year. There was some increase in cases of lead poisoning in the manufacture of storage batteries and other industries entailing contact with molten lead. This increase was balanced by a reduction in the cases of lead poisoning in certain industries, so that the total number of cases of poisoning reported in 1940 was almost identical with the number reported in 1939.

There was a great increase in the number of cases of gas poisoning, especially carbon monoxide, mainly from blast furnace and power gas; the number of cases was nearly double that of the previous year. There was an increase, also, in poisoning from nitrous fumes, nearly all the cases occurring in the nitration processes in factories where TNT is manufactured. This increase was considered to be due to abnormal working conditions resulting from restricted lighting and poor ventilation. There was an increase in the cases caused by chemicals, some of which were new and some of which were used in greater quantity.

There were 4,744 cases of dermatitis voluntarily reported, as compared with 2,952 in 1939. The most significant increase was in chemical manufacture (1,298 as compared with 477 in 1939) and in mechanical and electrical engineering industries (863 in 1940 and 395 in 1939). Less significant increases were reported in leather manufacture (165 as compared with 99 in 1939) and in welding, plating, and polishing of metal (398 as compared with 271 in 1939). Increase in the use of radioactive paint has required special precautions, which it was believed had thus far been effective.

In concluding his report, the senior medical inspector states that it would be incomplete without some reference to the work now being done by women. "Of their keenness to do what they are required to do, I have nothing to add to what is general knowledge, and so far as it is possible to judge, the work upon which they are being employed is well within their capacity. The idea that the ordinary conditions of work must be improved because women are to be employed is, I consider, unsound. In general, if the conditions are unsuitable for women they are equally unsuitable for men. It is true that some types of work are of themselves unsuitable for women, but that is an entirely different matter. At present there is work which has to be done which is a hazard to health and life, both to men and women, whatever precautions may be taken. The women, I believe, are willing to share this risk with the men."

Administration

The administration of the Factories Act, together with the Factories Inspectorate, was transferred by a defense regulation in June 1940 from the Home Office to the Ministry of Labor and National Service, for the duration of the war.

Vacations with Pay

VACATION POLICIES IN RETAIL STORES

EXTENSION of the practice of giving paid vacations, and liberalization of existing vacation policies in retail stores are shown by a study by the National Retail Dry Goods Association¹ covering the plans of a group of representative member companies in effect in 1939 and 1940 as compared with a similar study in 1938. At the present time, with the productive industries and the selective draft drawing employees from distributive services, it has become more important than ever for stores to maintain the interest and morale of their employees, and according to the study the paid-vacation plan has been found to be perhaps the most effective in its appeal to employees.

The report covers the vacation policies of 103 firms, whose gross volume of business ranged from \$50,000 to \$35,000,000 a year. Of this number, 16 stores reported a change in policy which either extended the paid-vacation plan to a larger proportion of their working force or increased the vacation period.

Three-fourths of the stores had made no change in their vacation policies in 1940, and in no case was a shift to a less liberal plan reported. When compared with the 1938 study, in which 18 percent of the 124 stores covered reported changes toward more limited vacations and only 2 percent reported a more liberal policy, it is evident that there was a decided trend toward liberalization of the plans in 1940. The 16 stores which had liberalized their plans had all reduced the period of service required for a vacation and in 11 cases had also extended the vacation period.

In 98 of the 103 stores covered by the study, full pay was given for the entire vacation period and employees were not required to take extra time without pay. Two of the remaining stores gave paid vacations only to executives and department heads, 2 others reported a combination plan of part paid and part unpaid vacation, and 1 did not give paid vacations either to executives or to employees. In 1938, 25, or 20 percent, of the 124 stores surveyed required employees to take vacations without pay and 11, or 9 percent, had combination plans of part paid and part enforced time off.

¹ National Retail Dry Goods Association. *Store Vacation Policies*. New York, 1941.

Length of Vacations

Of the 100 stores which reported paid vacations for rank and file employees, 30 reported the maximum vacation period was 1 week for varying service periods and 70 reported that it was 2 weeks. Some of these stores granted longer vacations for certain long-service employees, but in most instances only a limited number of workers were covered. In 1938, only 50 percent of the reporting stores gave a maximum period of 2 weeks, as compared with 70 percent in 1940.

As many as 40 different plans were reported in the present study, but they may be grouped roughly into the standard plans, under which the length of the paid vacation is identical for all employees who have met the original service requirement, with no additional time provided for workers with longer employment records, and the graduated plans which, within the limits of the maximum vacation period, provide for a vacation based on the period of employment.

In general, the latter type of plan is more liberal, and the fact that almost three-fourths of the companies covered in the study had this type of plan indicates that it is considered the more desirable of the two. The graduated plan most frequently found allowed 3 days' vacation, with pay, for 6 months' service, 1 week after employment of 1 year, and 2 weeks for 2 or more years' service. In other cases the vacation schedules varied directly with the number of months worked until the maximum was reached.

In 1938 only 6 stores gave vacations of 3 days for employment ranging from 6 months to 1 year, as compared with 21 in the present study. The report states that vacation policies in the 1938 survey undoubtedly reflected the business conditions of that year and management's efforts to reduce operating expenses, but the change in policy shown by the 1940 figures suggests that, in addition to the liberalization of policy brought about by improved business conditions, there is also a tendency to widen vacation benefits by taking in groups of employees who were formerly not covered.

Other Policies

Although the stores were not requested to describe their policies in regard to part-time or contingent employees, six stores reported that vacations were granted to such employees. These vacations were given to workers continuously employed on a part-time or contingent basis for a certain period and were based on the proportionate amount of time worked.

Compulsory time off without pay was reported by only two stores giving paid vacations. In one case, after 1 year's service 1 week's vacation with pay and 1 week without pay was given; for 6 months' service 2 weeks' vacation was required but only 3 days were paid for;

and for less than 6 months' service 2 weeks' vacation without pay was required. In the other case, employees with 2 years' service received a 2-week vacation with pay, but for 1 year of service a paid vacation of 1 week and 1 week without pay was given, while for less than 1 year of employment a 2-week vacation without pay was required.

Forty-three of the companies actively discouraged employees from asking for and taking additional leave without pay, but of the remaining 60 companies about half actively encouraged this practice and in the other cases it was optional with the employee.

More than half of the stores granted vacations with pay to employees voluntarily resigning during the vacation period, and one-third of the stores did not, while in 12 cases (11 percent) such payments depended upon the individual circumstances.

The liberalization of vacation policies for rank and file employees has had the effect of bringing them more into line with the vacations given to executives. Only 35 percent of the stores surveyed gave their executives more liberal consideration in the matter of paid vacations, as compared with 43 percent of the stores covered in the 1938 survey. In general, the liberality shown to executives took the form of a shorter required employment period.

A supplementary survey of 86 firms was made regarding the practice of giving paid winter vacations in addition to those given in the summer. Only two of the companies reported winter vacation policies based on service requirements which take in the majority of rank and file employees. Eleven companies gave vacations to employees with service periods ranging from 5 to 25 years; while 2 stores gave 1 and 2 days off for long hours worked prior to Christmas. Five stores gave winter vacations only to executives, with the exception of 1 day for employees in 1 store. In these cases it was indicated also that the vacation was given on account of the hours worked during the Christmas season.

The study showed in general that there has been a steady liberalization and revision movement during the past 2 years.

From the viewpoint of the individual worker one of the less-attractive features of employment in the retail field has always been that longer hours or a 6-day week are involved, whereas in industry or in general office work a 5-day or 5½-day week often is in force. In a growing number of instances stores have attempted to reduce their basic daily and weekly work schedules. According to the study here reviewed the trend towards liberalization of summer vacation benefits and the adoption of winter vacation policies is one evidence of store recognition of this factor, with a consequent effort to balance store working schedules by paid time off. It is probable that the movement in this direction will continue in the case of stores with restricted vacation policies, particularly in view of present industrial employment competition and increased pressure by labor organizations for the granting of paid vacations.

Cost of Living

CHANGES IN COST OF LIVING IN LARGE CITIES, NOVEMBER 15, 1941

LIVING costs of moderate-income families rose 0.7 percent from mid-October to mid-November. The greatest increases were in food and clothing costs with smaller advances in all other major groups. No reports are yet available on changes in living costs since the entry of the United States into the war. However, from the outbreak of the war in Europe to November 15, the average increase in living costs was 11.8 percent.

The index of the cost of goods purchased by wage earners and lower-salaried workers for November 15, 1941, was at the highest point since December 1930. Higher prices for goods and services were responsible for a rise of 9.7 above the 1935-39 average and defense excise taxes levied in 1940-41 accounted for an additional five-tenths of 1 percent.

Food.—Retail food costs advanced 1.3 percent between mid-October and mid-November, continuing the rise which began about a year ago. The largest price advances were reported for eggs and fresh fruits and vegetables, such as apples, bananas, carrots, and green beans, which generally rise during the late fall and early winter. The price increases for oranges, spinach, and onions reflected relatively short market supplies. Other foods showing substantial price gains were fresh milk, coffee, and fresh fish. The average cost of cereals and bakery products remained unchanged. Meat prices declined considerably as is usual at this time of year, when beef and pork are marketed in large quantities.

Rent.—Rents in the large cities increased on the average by 0.4 percent between mid-October and mid-November. Higher rentals were reported for relatively few dwellings. Of the 21 cities included in this survey, only one city showed an increase of as much as one percent in the total rental bill, when rents which remained unchanged or decreased are averaged with those which rose.

Fuel, electricity, and ice.—Slightly higher prices were reported for coal and wood in a few cities. Two cities, Minneapolis and New York, reported that fuel-oil prices were lower in mid-November than in mid-October.

Clothing.—Clothing customarily purchased by families of wage earners and lower-salaried clerical workers cost 1.4 percent more on

November 15 than on October 15. November prices were reported as being much higher for men's cotton clothing and felt hats; for women's wash frocks, rayon dresses, and silk hose; and for shoes. Only scattered price rises were reported for wool clothing and in some cases lower prices were reported for men's and women's coats. The kinds of wool clothing on the market change with the seasons and winter price levels are usually established by October 15. On November 15 this year, however, the total clothing budget was more than 2 percent higher than on October 15 in 6 of the 21 cities from which the Bureau obtained clothing prices.

Housefurnishings.—Prices for electrical and cooking equipment continued to rise this month and were largely responsible for the increase of 0.8 percent in housefurnishings in large cities. The higher prices reported for electrical goods and gas stoves reflect the new defense excise taxes on retailers' stocks purchased since October 1. The decline shown for New York City is accounted for by the change in the city sales tax from 2 to 1 percent.

Miscellaneous goods and services.—Prices for tires and tubes continued to rise in most cities. Soap prices also continued their earlier advances. Five of the 21 cities reported lower gasoline prices. In St. Louis, this decline was enough to cause an 0.4-percent drop in the cost of miscellaneous goods and services in spite of the increases which occurred in prices of other commodities included in this group.

TABLE 1.—Percent of Change from October 15 to November 15, 1941, in the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers, by Groups of Items

Area and city	All items	Food	Clothing	Rent	Fuel, electricity, and ice	Housefurnishings	Miscellaneous
Average: Large cities.....	+0.7	¹ +1.3	+1.4	+0.4	(²)	+0.8	+0.1
New England: Boston.....	+1.4	+2.8	+1.7	+ .9	(³)	(³)	+ .2
Middle Atlantic:							
Buffalo.....	+ .8	+ .7	+3.0	+ .9	+ .2	+1.5	(³)
New York.....	+ .6	+1.5	(³)	(³)	— .4	— .5	+ .4
Philadelphia.....	+ .3	— .3	+2.8	+ .3	(³)	+2.2	(³)
Pittsburgh.....	+ .6	+1.0	+2.4	(³)	(³)	+ .6	+ .2
East North Central:							
Chicago.....	+ .5	+1.1	+1.1	+ .2	+ .2	+ .4	(³)
Cincinnati.....	+ .5	+1.5	(³)	+ .2	+ .1	+ .2	(³)
Cleveland.....	+1.0	+2.1	+1.4	+ .4	(³)	+ .9	+ .3
Detroit.....	+ .5	+ .8	+2.3	+ .2	+ .1	+1.3	(³)
West North Central:							
Kansas City.....	+ .7	+1.0	+1.5	+ .7	(³)	+1.8	(³)
Minneapolis.....	+ .4	+ .4	+ .8	+ .1	— .2	+ .1	+ .7
St. Louis.....	+ .9	+2.1	+1.6	+ .8	(³)	+1.8	— .4
South Atlantic:							
Baltimore.....	+ .8	+ .6	+2.4	+1.0	(³)	+2.1	+ .4
Savannah.....	+ .4	+ .3	+1.9	+ .2	+ .6	+1.0	+ .1
Washington, D. C.....	+ .1	— .4	+ .9	+ .1	(³)	+ .2	+ .2
East South Central: Birmingham.....	+1.5	+2.6	+2.7	+ .8	+1.0	+1.6	+ .5
West South Central: Houston.....	+ .9	+1.7	+2.0	+ .2	+ .1	+ .9	(³)
Mountain: Denver.....	+1.2	+3.0	+ .9	(³)	(³)	+1.7	+ .2
Pacific:							
Los Angeles.....	+1.1	+2.7	+ .6	+ .4	(³)	+ .4	+ .2
San Francisco.....	+1.1	+1.6	+2.0	+ .2	+1.0	+1.8	+ .4
Seattle.....	⁴ + .4	+ .7	+ .7	+ .2	+ .1	⁴ + .6	+ .1

¹ Based on data for 51 cities.

² Based on data for 34 cities.

³ No change.

⁴ October 15 indexes revised; all items to 113.0 and housefurnishings to 114.1.

TABLE 2.—Indexes of the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers by Groups of Items, November 15, 1941

(Average 1935-39=100)

Area and city	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House-furnishings	Miscellaneous
Average: Large cities.....	110.2	¹ 113.1	114.4	107.9	² 104.0	115.8	107.1
New England: Boston.....	108.6	111.5	113.4	103.5	110.4	113.3	104.9
Middle Atlantic:							
Buffalo.....	113.0	115.2	115.6	113.9	103.2	119.5	110.4
New York.....	108.8	113.1	111.5	102.9	103.7	110.6	107.1
Philadelphia.....	108.4	108.7	114.7	105.6	103.3	115.0	107.6
Pittsburgh.....	110.2	112.9	117.4	106.9	107.1	116.4	105.9
East North Central:							
Chicago.....	110.8	114.8	110.7	112.3	103.3	114.3	105.7
Cincinnati.....	110.5	114.3	115.0	103.6	102.6	122.2	107.5
Cleveland.....	112.9	116.4	117.8	113.6	112.0	117.6	106.2
Detroit.....	112.6	112.0	116.2	116.9	105.4	116.7	110.0
West North Central:							
Kansas City.....	107.9	108.2	114.2	107.5	102.7	114.1	105.9
Minneapolis.....	110.6	112.9	114.0	108.9	98.8	116.6	110.4
St. Louis.....	109.8	117.0	114.4	103.2	105.9	110.4	104.5
South Atlantic:							
Baltimore.....	111.3	114.3	112.8	112.2	103.4	121.2	106.3
Savannah.....	113.3	118.6	117.8	112.7	101.2	116.4	108.0
Washington, D. C.....	108.5	111.4	118.8	101.3	101.7	123.4	106.2
East South Central: Birmingham.....	113.4	112.6	119.7	127.0	99.9	114.4	108.0
West South Central: Houston.....	111.2	118.6	117.8	107.0	93.7	117.8	105.8
Mountain: Denver.....	109.7	113.2	112.6	108.3	98.2	117.0	107.2
Pacific:							
Los Angeles.....	111.2	115.4	116.4	108.5	94.2	115.2	108.2
San Francisco.....	110.5	114.4	113.8	105.0	92.8	115.3	109.5
Seattle.....	³ 113.5	118.9	115.1	115.0	98.6	³ 114.8	109.5

¹ Based on data for 51 cities.² Based on data for 34 cities.³ October 15 index revised; all items to 113.0; and housefurnishings to 114.1.

DISTRICT OF COLUMBIA RENT-CONTROL LAW

IN 1941 a "rent-control" act (Public No. 327) for the District of Columbia was enacted by Congress. This act, which may serve as a model for the Nation, is aimed at preventing the skyrocketing of rents in Washington during the present emergency and at stabilizing rents at the level prevailing on January 1, 1941. Following a serious housing shortage in Washington after the World War, Congress attempted to solve the problem by legislative measures. Its attempt to prevent evictions and establish rent controls proved ineffective, and on October 22, 1919, the so-called Ball Law became operative. This law sought to fix rents at a fair and reasonable value. This method likewise proved weak, yet the United States Supreme Court upheld the constitutionality of the law as an emergency measure on April 18, 1921, in the case of *Block v. Hirsh* (256 U. S., 135). The act was continued in effect by subsequent legislation until May 22, 1922, on which day a third act, declaring that an emergency still existed, reenacted the law providing that it continue 2 more years. However, the United States Supreme Court on April 21, 1924 (*Chastleton Corp. v. Sinclair*, 264 U. S. 543), decided that, since the emergency had

ended, the law could not continue in effect. In the legislation recently adopted no reference was made to the "fair and reasonable value" of rents provided for in the former Ball Act.

The new act, which became effective on January 1, 1942, and will terminate on December 31, 1945, establishes maximum-rent ceilings and minimum-service standards, as follows:

(a) For housing accommodations rented on January 1, 1941, rent and service to which the landlord and tenant were entitled on that date.

(b) For those not rented on January 1, 1941, but which had been rented during the year ending on that date, rent and service to which the landlord and tenant were last entitled within that year.

(c) For those not rented on January 1, 1941, nor within the year ending on that date, rent and service generally prevailing for comparable housing accommodations as determined by the Administrator of Rent Control.

Under these provisions of the law, housing accommodations are defined as any property offered for rent for living or dwelling purposes, including houses, apartments, hotels, and rooming or boarding house accommodations and the services or facilities supplied in connection with the use of the property. A landlord is defined as any person entitled to receive rent for housing accommodations, including agents and sublessors.

Modifications or Adjustments

Special provision is made for hotels. A hotel is defined as an establishment operating under a hotel license and having more than 50 rooms used predominantly for transient occupancy. A card or sign plainly stating the rental rate per day is required to be posted in each room of the hotel and a copy filed with the Administrator. Such rates, when they conform to the standards established in the law, become the maximum-rent ceiling for the accommodations. Such transient rates may not exceed the published or standard rate charged as of January 1, 1941, except that after written notice by the landlord to the Administrator and subject to review by the Administrator increases may be made to compensate for substantial changes in maintenance or operating costs or for a substantial capital improvement or alteration.

In the case of apartment units which are changed from furnished to unfurnished, or vice versa, the rates charged shall be the same as for comparable housing accommodations on January 1, 1941, but no such change may be made without the consent of the current occupant. Again, where housing accommodations are changed from permanent to transient use, the rate may not exceed that posted for comparable accommodations.

The statutory rent and service requirements remain in effect until adjustment is ordered or permitted by the Administrator. Whenever in the judgment of the Administrator a general increase or decrease in taxes or other maintenance or operating expenses has occurred or is about to occur, so as to affect the maintenance and operation of housing accommodations generally or of any particular class of housing accommodations, he may increase or decrease the maximum-rent ceiling or minimum-service standard, or both. Landlords and tenants may petition the Administrator for an adjustment of the maximum-rent ceiling on the ground that the ceiling is lower or higher than the rent generally prevailing for comparable housing accommodations. In addition, a tenant may petition the Administrator for an adjustment of the maximum-rent ceiling on the ground that it permits an unduly high rent figure. Adjustments may also be made, upon petition, in the service standards applicable to rental property.

The act further prescribes the procedure whenever a landlord or a tenant petitions for an adjustment of maximum-rent ceilings or minimum-service standards. Such petition is referred to an examiner designated by the Administrator, who is authorized to hold a hearing and is required to make findings and recommend an appropriate order. Such findings and orders may be reviewed by the Administrator and, in his discretion, he may grant a hearing. However, if neither party appeals to the Administrator within 5 days for a review of the case, the findings and order of the trial examiner become the findings and order of the Administrator. Orders of the Administrator may be reviewed in the Municipal Court of the District of Columbia, but no order may be set aside unless it is contrary to law or is not supported by substantial evidence.

Administration of Act

The act is administered by the Administrator of Rent Control, who is appointed by the Commissioners of the District of Columbia; he must have resided in the District for not less than 3 years prior to his appointment. The Administrator is authorized to issue rules and regulations, subject to approval by the Commissioners of the District of Columbia, and to issue such orders as may be deemed necessary or proper to carry out the purposes and provisions of the act. The Administrator may also require a license as a condition of engaging in any transaction involving the subletting of any housing accommodations or the renting of housing accommodations in a rooming or boarding house or hotel. No fee may be charged for this license.

Recovery of Possession by Landlord

Under the act, a landlord may not recover possession of his rented property so long as the tenant continues to pay the rent to which the landlord is entitled unless (1) the tenant is violating an obligation of his tenancy or is committing a nuisance or is using the housing accommodations for an immoral or illegal purpose or for other than living or dwelling purposes, (2) the landlord seeks in good faith to recover the possession of the property for his immediate and personal use and occupancy as a dwelling, (3) the landlord has contracted to sell his property for immediate and personal use and occupancy as a dwelling by the purchaser, or (4) the landlord seeks to recover possession for the immediate purpose of substantially altering, remodeling, or demolishing the property and replacing it with new construction.

Violations

It is unlawful for any person to demand or receive any rent in excess of the maximum-rent ceiling or refuse to supply any service required by the minimum-service standard. In case a landlord receives rent or refuses to render services in violation of any provision of the act or regulation or order under it, the tenant, or the Administrator on his behalf, may bring suit to rescind the lease or rental agreement, or an action may be brought for double the excess rent charged or for double the value of the services refused in violation of the established minimum-service standard. In either case a tenant is entitled to recover a minimum of \$50, regardless of the amount involved. Reasonable attorney's fees and costs may be allowed. The Municipal Court of the District of Columbia is given exclusive jurisdiction to hear and determine all cases under the act.

In addition to the civil remedy for violations of the act, any person willfully violating any provision of the act or any regulation, order, or requirement thereunder, or any person who makes false statements or entries in documents or reports that may be required under the act, and persons who willfully participate in any device or arrangement to evade the act shall be subject to a fine of not more than \$1,000 or imprisonment for not more than 1 year, or both. Injunctions may also be granted by the United States District Court for the District of Columbia to prevent violations of the act or regulations or orders issued thereunder.

Wage and Hour Statistics

HOURLY ENTRANCE RATES PAID TO COMMON LABORERS, 1941 ¹

Summary

HOURLY entrance rates of pay of adult male common laborers in 20 industries averaged 56.4 cents in July 1941, according to a study recently completed by the Bureau of Labor Statistics. The study covered 7,834 establishments in which 278,906 common laborers were reported as working at entrance rates. The average rate for the country as a whole, 56.4 cents, was 11.5 percent (5.8 cents) higher than that of 50.6 cents an hour reported in the same industries in July 1940. This increase compares favorably with the general upward trend of wages for all workers between July 1940 and July 1941.

Only four-tenths of 1 percent of the common laborers covered in the 1941 study were paid entrance rates of under 30 cents, while over 42 percent were paid 62.5 cents or more an hour. Compared to 1940, the relative number of common laborers working at entrance rates of less than 30 cents an hour in 1941 decreased more than one-half. On the other hand, the relative number of common laborers with hourly entrance rates of 62.5 cents or more increased from 1 of every 4 to 2 of every 5.

The study revealed marked differences in entrance rates by region, size of city, and industry. The average rate was 62.3 cents an hour in the North and West region as compared with an average of 38.4 cents an hour in the South and Southwest region. Common laborers in plants in cities of 1,000,000 and over, and 500,000 and under 1,000,000 population had average rates of 65.7 and 66.1 cents an hour, respectively, while in cities with populations of less than 2,500, and between 2,500 and 5,000, the averages were 48.0 and 49.5, respectively. Among the 20 industries surveyed, the iron and steel industry paid the highest average entrance rate for common laborers (68.9 cents) and the fertilizer industry the lowest (38.4 cents).

¹ Prepared by Willis C. Quant, of the Bureau's Division of Wage and Hour Statistics, under the supervision of Edward K. Frazier.

Scope and Method

The basic data on entrance rates for the present study were obtained from various establishments in the industries surveyed by the mail-questionnaire method.

As in previous studies by the Bureau, the term "common laborer" was defined in the questionnaire as signifying a worker "who performs physical or manual labor of a general character and simple nature, requiring no special training, judgment, or skill." The definition excluded machine operators and other workers performing specific duties and designated by distinct occupational titles, even though they were paid at the same rate as common laborers. Furthermore, apprentices and learners were excluded from the classification "common laborer."

The "entrance rate of pay" was defined as being the lowest rate paid to common laborers when newly hired. In recognition of the fact that some establishments have entrance rates for common laborers which vary because of danger involved, undesirable odors, exposure to severe temperatures, heavy burdens to handle, etc., the questionnaire called for each entrance rate separately. In addition to the rates, the questionnaire called for the number of adult male common laborers, by race, at each entrance rate. These employment figures were used as weights in computing the averages and developing the wage distributions presented in this report. No information was requested for females, as very few women come under the classification of common laborer in the industries surveyed. It is quite possible that all of the reporting establishments did not interpret the Bureau's definition of common laborer in the same light. Accordingly, the figures in this report may cover some unskilled employees other than common laborers.

The current study was made as of July 1 and covered the same industries as in 1940. Reports were received from establishments in all States and in the District of Columbia. The number of establishments returning reports in 1941 was about 10,000. Of these establishments, approximately 4 of every 5 reported one or more common laborers at entrance rates. The number of establishments included in the present study is substantially greater than in 1940, since the mailing list used in 1940 was considerably enlarged to include additional establishments and since a greater percentage of replies in 1941 showed common laborers at entrance rates than was the case in 1940. The 7,834 establishments included in the present study reported 278,906 common laborers at entrance rates. These figures represent an increase of 1,263 establishments and 75,977 common laborers over the 1940 sample of 6,571 establishments and 202,929 common laborers.

Nearly 60 percent of the increase in employment took place in the 5,320 establishments that reported in both years. The average number of common laborers at entrance rates in 1941 among the plants that reported in 1940 was 42. In all reporting establishments in 1941 the average was 35.

The 1941 average entrance rates for the establishments reporting in both years, by industry, for the country as a whole, were, with three exceptions, within 1 cent of the corresponding averages based on all reporting establishments in 1941.

Variations in Entrance Rates for the Country as a Whole

In July 1941 the average hourly entrance rate for 278,906 common laborers in 20 industries combined, for the country as a whole, was 56.4 cents. Although the type of work performed by common laborers in the industries studied is of a fairly homogeneous character, there is a wide range in the hourly entrance rate paid to the individual workers—from less than 30 cents to more than \$1.10 an hour—and as a result, the general average has only a limited significance. Within each industry geographical location, hazards of the job, size of city, race of worker, and other factors affect entrance rates.

Although 95 of every 100 (94.8 percent) common laborers were paid hourly entrance rates ranging from 30.0 to 77.5 cents, the distributions in table 1 fail to reveal any marked single concentration. Entrance rates ranging from 72.5 to 77.5 cents per hour were paid to nearly one-fifth (18.5 percent) of all common laborers surveyed in 1941. This grouping, the largest within any single 5-cent interval, is influenced by the large number of common laborers reported at entrance rates in the iron and steel industry in the Pittsburgh and Great Lakes areas. Another important concentration existed at exactly 30 cents an hour (the statutory minimum provided by the Fair Labor Standards Act for employees engaged in interstate commerce). In 1941, 9.8 percent of the total number surveyed received this amount. Concentrations also occurred in the various classes between 40.0 and 72.5 cents, the largest being 11.6 percent in each of the classes, 47.5 and under 52.0 cents, and 62.5 and under 67.5 cents.

Comparisons of the distributions of common laborers by hourly entrance rates for July 1941 with those for July 1940² reveal a general upward movement affecting in greatest measure the wage intervals falling within the range of 62.5 and under 77.5 cents. From 1940 to 1941, the most decided positive change was an increase from 1.5 to 18.5 percent in the relative number of common laborers receiving entrance rates of 72.5 and under 77.5 cents. A decrease from 19.6 to 11.6 percent in the relative number being paid 62.5 and under 67.5

² See Bureau of Labor Statistics Serial No. R.1242: Entrance Wage Rates of Common Laborers, July 1940.

cents was the second largest change between the 2 years. Another important change was the decrease from 14.7 to 9.8 percent in the relative number of common laborers receiving an entrance rate of exactly 30 cents. The relative number of workers at entrance rates between 67.5 and 72.5 cents an hour more than tripled, while the relative number of workers with starting rates under 32.5 cents an hour decreased by about one-third.

The general upward shift in entrance rates from 1940 to 1941 can be attributed in large part to the upward trend of wages in industry and to a relative increase in employment of common labor in industries with the higher wage rates. The pronounced increase in the relative number of common laborers paid 72.5 and under 77.5 cents an hour and the decrease in those having rates between 62.5 and 67.5 cents can be accounted for in part by a 10-cent increase in hourly wage rates which went into effect generally in the iron and steel industry during the early part of 1941.

TABLE 1.—*Distribution of Adult Male Common Laborers, by Hourly Entrance Rates, in 20 Industries, July 1941*

Hourly entrance rate	Number of laborers at entrance rates	Simple percentage	Cumulative percentage
All rates.....	278,906	100.0	
Under 30.0 cents.....	1,243	.4	0.4
Exactly 30.0 cents.....	27,450	9.8	10.2
Over 30.0 and under 32.5 cents.....	1,033	.4	10.6
32.5 and under 35.0 cents.....	6,706	2.4	13.0
35.0 and under 37.5 cents.....	7,441	2.7	15.7
37.5 and under 40.0 cents.....	1,597	.6	16.3
40.0 and under 42.5 cents.....	18,754	6.7	23.0
42.5 and under 47.5 cents.....	16,916	6.1	29.1
47.5 and under 52.5 cents.....	32,089	11.6	40.7
52.5 and under 57.5 cents.....	25,472	9.1	49.8
57.5 and under 62.5 cents.....	21,566	7.7	57.5
62.5 and under 67.5 cents.....	32,194	11.6	69.1
67.5 and under 72.5 cents.....	21,328	7.6	76.7
72.5 and under 77.5 cents.....	51,435	18.5	95.2
77.5 and under 82.5 cents.....	6,552	2.3	97.5
82.5 and under 90.0 cents.....	4,176	1.5	99.0
90.0 and under 100.0 cents.....	1,516	.5	99.5
100.0 and under 110.0 cents.....	1,160	.4	99.9
110.0 cents and over.....	278	.1	100.0

Geographical Variations

As previously indicated, geographical location is one of the variables that operates to produce different levels of entrance rates. For the purpose of this study, as in the 1940 study, the country has been divided into two broad regions, namely the "North and West" and the "South and Southwest." As indicated in table 2, the former includes 33 States and the District of Columbia, and the latter, 15 States. In establishments in the North and West region, the average entrance rate amounted to 62.3 cents an hour, or about 24 cents more than the

average of 38.4 cents paid by establishments in the South and Southwest region. Even within these broad regions there is considerable variation in entrance rates. Furthermore, there is some overlapping of State averages in the two regions. For example, the average for the southern State of Alabama exceeds the averages for the northern States of North Dakota and Vermont; and the averages for Texas and North Dakota are closer together than the averages for Maine and Massachusetts. The general wage level for States included in the South and Southwest region is, however, distinctly below that in the North and West region.

That the broad regions, North and West, and South and Southwest, do not constitute altogether homogeneous wage areas is evident from a study of the averages of the respective States within these regions. In the North and West region the average rates for the individual States tend to be higher in the direction of either coast than in the centrally located Prairie States of North Dakota, South Dakota, Kansas and Nebraska. Excepting North Dakota, which had the lowest average rate (42.1 cents) in the North and West, the averages of these Prairie States differed by less than 1 cent.

Common laborers in the Rocky Mountain States were paid rates averaging above those in the Prairie States, ranging from the relatively high averages of 66.4 cents in Idaho and 64.4 cents in Montana to a low of 54.4 cents in Utah. Except for the average of 66.4 cents for Idaho, common laborers in the three Pacific Coast States had the highest average rates in the entire country. Of these States, Washington had the topmost average—73.8 cents.

Each of the populous States (except Delaware) which lie east of the Prairie States had average hourly entrance rates of 57 cents or more, the highest being 65 cents in the District of Columbia. Other States in this group averaging 60 cents or more are Missouri, Illinois, Indiana, Michigan, Ohio, Pennsylvania, and New Jersey. The averages in these States ranged from 61.7 to 64.5 cents. In the remaining States other than Delaware, namely, Iowa, Minnesota, Wisconsin, West Virginia, Maryland, and New York, entrance rates averaged from 57.0 to 59.9 cents. The average for Delaware was 51.7 cents. The six New England States present two distinct wage level areas, one comprising New Hampshire, Vermont, and Maine, and the other, Massachusetts, Connecticut, and Rhode Island. In the former group, averages ranged from 44 to 51 cents an hour. The average rates for the southern New England States are like those prevailing in the midwest States bordering on the Great Lakes.

Although the variation between the lowest and highest State averages in the South and Southwest is considerably less than that shown in the North and West, there are also similar sectional patterns discernible in this region. Of the six States in the South and Southwest

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region lying west of the Mississippi River, only Arkansas and Louisiana paid entrance rates averaging under 40 cents an hour. East of that river, average hourly entrance rates of less than 40 cents predominate. In fact, among the nine States in this area, only Kentucky, Virginia, and Alabama averaged as much as 40 cents or more. The average for Kentucky, however, amounted to 50.2 cents, which compares favorably with the rates for several northern States. The States with the lowest average hourly entrance rates are the Atlantic Seaboard States of North Carolina, South Carolina, Georgia, and Florida, where the averages range from 31.5 cents (South Carolina) to 33.5 cents (Georgia). The average for Mississippi was very close to that for Georgia, amounting to 33.9 cents.

TABLE 2.—Average Hourly Entrance Rates of Adult Male Common Laborers in 20 Industries, by State and Region, July 1941

Region and State	Estab- lish- ments	Laborers at en- trance rates	Average hourly entrance rate	Region and State	Estab- lish- ments	Laborers at en- trance rates	Average hourly entrance rate
United States.....	7, 834	278, 906	\$0. 564	North and West—Con.			
North and West.....	6, 284	209, 305	. 623	Oregon.....	148	5, 510	\$0. 696
California.....	522	14, 647	. 659	Pennsylvania.....	659	30, 539	. 638
Colorado.....	79	1, 784	. 582	Rhode Island.....	51	1, 751	. 645
Connecticut.....	179	2, 873	. 642	South Dakota.....	21	440	. 521
Delaware.....	46	1, 702	. 517	Utah.....	38	863	. 544
District of Colum- bia.....	57	1, 702	. 650	Vermont.....	45	581	. 441
Idaho.....	36	806	. 664	Washington.....	211	8, 255	. 738
Illinois.....	443	19, 740	. 638	West Virginia.....	109	6, 878	. 576
Indiana.....	277	13, 824	. 623	Wisconsin.....	254	6, 462	. 570
Iowa.....	123	4, 831	. 503	Wyoming.....	19	151	. 599
Kansas.....	109	1, 658	. 517	South and Southwest..	1, 550	69, 601	. 384
Maine.....	111	3, 026	. 510	Alabama.....	122	8, 515	. 454
Maryland.....	118	6, 402	. 581	Arizona.....	23	418	. 447
Massachusetts.....	313	5, 945	. 574	Arkansas.....	73	5, 126	. 352
Michigan.....	371	11, 354	. 621	Florida.....	105	4, 927	. 329
Minnesota.....	151	5, 048	. 599	Georgia.....	133	6, 156	. 335
Missouri.....	181	5, 418	. 623	Kentucky.....	80	2, 490	. 502
Montana.....	42	916	. 644	Louisiana.....	103	8, 209	. 396
Nebraska.....	46	960	. 514	Mississippi.....	48	2, 577	. 339
Nevada.....	8	151	. 595	New Mexico.....	27	518	. 405
New Hampshire.....	49	1, 156	. 492	North Carolina.....	151	5, 292	. 317
New Jersey.....	311	8, 003	. 617	Oklahoma.....	89	2, 059	. 447
New York.....	438	12, 566	. 586	South Carolina.....	73	4, 695	. 315
North Dakota.....	16	244	. 421	Tennessee.....	115	4, 016	. 389
Ohio.....	703	23, 119	. 645	Texas.....	244	9, 441	. 415
				Virginia.....	164	5, 252	. 403

The distributions of common laborers by hourly entrance rates in the North and West, and the South and Southwest (table 3), reflect broad differences in the average hourly rates for these regions. Rates ranging from 47.5 to 77.5 cents an hour were paid to 4 of every 5 common laborers reported in the North and West region. Of these, almost one-third are concentrated at rates between 72.5 and 77.5 cents an hour. In the South and Southwest region, about 3 of every 4 common laborers reported were paid hourly entrance rates of less than 47.5 cents, and nearly one-half of these were reported as receiving exactly 30 cents.

Differences in Rates by Race

Data presented in table 3 show that the 278,906 common laborers reported at entrance rates include 208,402 whites other than Mexican, 65,332 Negroes, and 5,172 Mexicans. There are outstanding differences in the racial composition of the laboring force as between the 2 broad regions. Of the 209,305 common laborers reported at entrance rates in the North and West, 7 of every 8 are whites other than Mexican. In the South and Southwest region, however, whites other than Mexican comprised only slightly more than one-third of the 69,601 common laborers reported. The 42,400 Negroes reported in this region not only constitute about 60 percent of all the common laborers in the area, but also represent about 65 percent of all the Negroes covered in the survey. Of the 5,172 Mexicans covered by the study, 60 percent are in the North and West region.

As previously noted, there is a difference of 24 cents between the hourly rate averages of the two regions in favor of the North and West for all common laborers reported. The differences are roughly the same for each race group, amounting to 20.7 cents for whites other than Mexican, 27.3 cents for Negroes, and 23.2 cents for Mexicans.

Hourly entrance rates for whites other than Mexican in the country as a whole (59.6 cents) exceeded those for Negroes (46.3 cents) by 13.3 cents. The 5,172 Mexican workers averaged 51.8 cents.

In the North and West the average rate for Negroes (64.0 cents) slightly exceeded the average for whites other than Mexican (62.1 cents) and that for Mexicans (61.0 cents). The relatively high rate for Negro laborers has been noted in earlier Bureau studies and can be attributed in large part to the concentration of Negroes in the higher wage industries, such as building construction, iron and steel, petroleum refining, and chemicals. About one-half of the Negro common laborers reported in 1941, but only about one-third of the whites other than Mexican were in these industries. A number of previous studies by the Bureau have failed to reveal any consistent differences in the wages of those Negro and white workers who had identical jobs in the same plants.

Negroes in the Southern and Southwestern States were paid hourly rates that averaged 36.7 cents, or nearly 5 cents less than the 41.4-cent average for whites other than Mexican. This difference does not necessarily indicate the payment of lower rates to Negroes within any single plant where both Negroes and whites are employed. The answer is to be found rather in the large proportion of Negroes concentrated in the relatively low paid industries. Over one-half of the Negro common laborers in this area were employed in the lumber (sawmills) and fertilizer industries which had the lowest average

rates in this region and in the country as a whole. Mexicans averaged 37.8 cents, which was only slightly higher than the average for Negroes.

At least 4 of every 5 workers in each racial group in the North and West region had rates of 47.5 cents or higher. On the other hand, hourly rates of less than 47.5 cents were paid to an outstanding proportion of common laborers in each racial group in the South and Southwest region. In the North and West region, one-fourth of all whites other than Mexican and approximately three-tenths of the Mexicans had entrance rates of from 72.5 to 77.5 cents an hour. Slightly over one-fifth of the Negroes in this region had rates of between 62.5 and 67.5 cents. While 15 of every 100 Negroes had rates of 77.5 cents or more, about 5 of every 100 whites were paid such rates.

TABLE 3.—Percentage Distribution of Adult Male Common Laborers by Hourly Entrance Rates in 20 Industries, by Race and Region, July 1941

Hourly entrance rate	North and West				South and Southwest			
	All	White other than Mexican	Negro	Mexican	All	White other than Mexican	Negro	Mexican
Under 30.0 cents.....	(1)	(1)	(1)		1.7	1.0	1.9	5.8
Exactly 30.0 cents.....	0.7	0.7	1.2		37.3	27.9	43.4	24.1
Over 30.0 and under 32.5 cents.....	.1	.1		(1)	1.3	1.7	1.2	(1)
32.5 and under 35.0 cents.....	.1	.1	.1		9.2	6.4	11.2	1.7
35.0 and under 37.5 cents.....	.9	.9	.5	6.1	7.9	8.9	7.2	10.1
37.5 and under 40.0 cents.....	.3	.3	.1	3.7	1.4	.7	1.6	8.5
40.0 and under 42.5 cents.....	5.4	5.5	4.8	4.8	10.7	11.6	9.1	33.5
42.5 and under 47.5 cents.....	5.4	5.5	4.2	3.6	8.2	10.9	6.6	8.8
47.5 and under 52.5 cents.....	11.6	12.1	8.6	9.1	11.1	14.1	9.6	5.0
52.5 and under 57.5 cents.....	9.7	9.7	9.4	10.7	7.5	8.8	7.0	.3
57.5 and under 62.5 cents.....	9.9	10.4	6.7	4.1	1.2	2.4	.4	.9
62.5 and under 67.5 cents.....	15.0	14.3	20.7	15.2	1.1	2.0	.7	
67.5 and under 72.5 cents.....	10.1	10.2	9.7	8.8	.3	.8		
72.5 and under 77.5 cents.....	24.5	25.0	18.7	29.8	.5	1.2	.1	.7
77.5 and under 82.5 cents.....	2.9	2.0	10.3	3.0	.6	1.6		.6
82.5 and under 90.0 cents.....	2.0	1.8	3.8	.8				
90.0 and under 100.0 cents.....	.7	.8	.4	.2				
100.0 and under 110.0 cents.....	.6	.5	.7					
110.0 cents and over.....	.1	.1	.1	.1				
All rates.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of common laborers at entrance rate.....	209,305	183,260	22,932	3,113	69,601	25,142	42,400	2,059
Average hourly entrance rate.....	\$0.623	\$0.621	\$0.640	\$0.610	\$0.384	\$0.414	\$0.367	\$0.378

¹ Less than a tenth of 1 percent.

It is significant that a large number of the workers of each race in the South and Southwest had an entrance rate of exactly 30 cents an hour, the statutory minimum provided by the Fair Labor Standards Act for workers engaged in interstate commerce. Although there were heavy concentrations of whites other than Mexicans at rates between 40.0 and 52.5 cents, nearly 3 of every 10 were paid an hourly rate of exactly 30 cents. As regards Negroes, apart from the 11.2 percent having entrance rates between 32.5 and 35.0 cents and a much heavier concentration at exactly 30 cents, the distribution is

similar to that for whites other than Mexican. Hourly rates between 40.0 and 42.5 cents applied to one-third of the Mexicans in the South and Southwest. There was also a heavy concentration at exactly 30 cents an hour.

Differences by Region, Industry, and Race

In spite of the concentration of Negroes in the high-wage industries in the North and West, the average hourly entrance rate for Negroes in all manufacturing industries combined exceeded that of whites other than Mexican by only half a cent, the respective averages being 62.3 and 61.8 cents. Mexican laborers, with an average of 63.1 cents, earned more than either group. In all public utilities combined and in building construction, whites other than Mexican had the highest average.

Industry by industry in the North and West, no racial group maintained a consistent advantage. Negroes and whites other than Mexican, each had the highest average in 7 industries out of 17 for which data can be presented separately. Mexicans had the highest average in 3 individual industries. In no case was the difference very large, except in the lumber industry, where the average for whites other than Mexican exceeded that for Negroes by 24.7 cents an hour.³

The averages by race in the South and Southwest for all industries combined show little difference from those prevailing for the manufacturing industries alone. The manufacturing industries as a whole paid whites other than Mexican rates that averaged 41.3 cents per hour, which is approximately 5 cents more than the average for either Negroes or Mexicans. In 11 of the 13 manufacturing industries for which comparison can be made, whites other than Mexican had average rates higher than Negroes. Negroes were paid higher rates than whites other than Mexican only in the leather and fertilizer industries, the respective industry averages being 39.9 and 32.5 cents for Negroes and 38.9 and 31.3 cents for whites other than Mexican. In the lumber (sawmills) industry, Mexicans received the highest average rate.

In the public-utilities group, whites other than Mexican had the highest average entrance rate, 39.1 cents; and the averages for Mexicans and Negroes were close to 34 cents. In the building-construction industry where Mexicans and Negroes averaged 41 cents per hour, whites other than Mexican received 44 cents.

³ In 1940, the average for Negroes amounted to 51.3 cents. The decrease to 37.3 cents in the present study is due to the inclusion of several new plants, some of which had relatively low entrance rates for all common laborers.

TABLE 4.—Average Hourly Entrance Rates of Adult Male Common Laborers, by Industry, Region, and Race, July 1941

Industry	North and West			South and Southwest		
	White other than Mexican	Negro	Mexican	White other than Mexican	Negro	Mexican
Manufacturing.....	\$0. 618	\$0. 623	\$0. 631	\$0. 413	\$0. 363	\$0. 365
Automobile parts.....	(1)	(1)	(2)	(2)		
Brick, tile, and terra cotta.....	. 549	. 569	. 562	. 416	. 314	. 293
Cement.....	. 630	. 600	. 654	. 485	. 466	. 472
Chemicals.....	. 679	. 683	(2)	. 476	. 428	(2)
Fertilizer.....	. 561	. 504	. 613	. 313	. 325	(2)
Foundry and machine-shop products.....	. 557	. 570	. 580	. 402	. 354	. 309
Glass.....	. 563	. 516	(2)	. 489	. 394	
Iron and steel.....	. 702	. 695	. 699	. 586	. 542	
Leather.....	. 550	. 545	(2)	. 389	. 399	(2)
Lumber (sawmills).....	. 620	. 373	. 602	. 314	. 311	. 370
Meat packing.....	. 623	. 649	. 648	. 460	. 407	. 368
Paints and varnishes.....	. 592	. 602	(2)	. 402	. 332	(2)
Paper and pulp.....	. 571	. 572	. 535	. 485	. 463	
Petroleum refining.....	. 713	. 733	(2)	. 628	. 501	(2)
Rubber tires and inner tubes.....	(1)	(1)		(2)	(2)	
Soap.....	(1)	(1)	(2)	(2)	(2)	
Public utilities.....	. 536	. 502	. 427	. 391	. 337	. 343
Electric light and power.....	. 509	. 511	(2)	. 390	. 330	. 328
Electric street-railway and city motorbus operation and maintenance.....	. 589	. 496	. 425	. 371	. 354	(2)
Manufactured and natural gas.....	. 522	. 505	(2)	. 398	. 334	. 379
Building construction.....	. 739	. 708	. 737	. 440	. 410	. 410

¹ Regional figures omitted, to avoid disclosure of individual operations.² Because of the small coverage, no averages are presented.

Entrance Rates by Industry and Region

Entrance rates of common laborers are considerably affected by the types of industry in which they are employed as well as by the location of the establishments in the industry. This is clearly shown by the industry averages presented in table 5.

For the country as a whole, the average hourly entrance rates of the 16 manufacturing industries covered in the survey ranged from a high of 68.9 cents in iron and steel plants to a low of 38.4 cents in establishments in the fertilizer industry—a difference of 30.5 cents an hour. Additional evidence that different wage levels exist within the manufacturing industries surveyed may be had from the fact that the averages for chemicals, lumber (sawmills), iron and steel, and petroleum refining differ from the average for all manufacturing industries by as much as 8 to 13 cents per hour. Moreover, the average for fertilizer differs to the extent of 17.4 cents.

Manufacturing industries, other than iron and steel, paying entrance rates averaging more than 60 cents an hour are chemicals, meat packing, petroleum refining, and soap. Of these industries, petroleum refining was highest with an average rate of 65.9 cents an hour. In addition to the common laborers engaged in fertilizer manufacturing, those working in the lumber (sawmills) industry had rates

averaging less than 50 cents an hour, their average being 43.3 cents. The average for all manufacturing industries combined was 55.8 cents.

Of the common laborers in public utilities, those in electric street-railway and city motorbus operation and maintenance had the highest average entrance rate (54.7 cents). The average of 47.4 cents for common laborers in the electric light and power industry was lowest in this group, being 2 cents less than that paid by the manufactured and natural gas industry. Common laborers engaged in building construction had entrance rates that averaged nearly 65 cents, which is close to 15 cents an hour more than that for the public-utilities group and 9 cents higher than that for the manufacturing group.

Among the 13 manufacturing industries in the North and West for which data are presented, the petroleum refining and the iron and steel industries paid entrance rates that averaged above 70 cents an hour, the respective amounts being 71.5 and 70.1 cents. In the South and Southwest these same two industries had averages above that for any manufacturing industry as well as for the public utilities and building construction.

TABLE 5.—Average Hourly Entrance Rates of Adult Male Common Laborers, by Industry and Region, July 1941

Industry	Average hourly earnings of all wage earners ¹	Common laborers								
		Establishments reporting			Number of laborers at entrance rates			Average hourly entrance rate		
		Total	North and West	South and South-west	Total	North and West	South and South-west	Total	North and West	South and South-west
All 20 industries.....	(2)	7,834	6,284	1,550	278,906	209,305	69,601	\$0.564	\$0.623	\$0.384
Manufacturing.....	(2)	5,343	4,341	1,002	223,582	166,462	57,120	.558	.619	.380
Automobile parts.....	(2)	153	(3)	(3)	4,658	(3)	(3)	.584	(3)	(3)
Brick, tile, terra cotta.....	\$0.645	394	333	61	10,131	7,831	2,300	.504	.552	.339
Cement.....	.775	139	111	28	4,680	3,451	1,229	.589	.629	.474
Chemicals.....	.886	185	160	25	7,448	6,082	1,366	.637	.680	.446
Fertilizer.....	.494	329	130	199	6,195	1,765	4,432	.384	.535	.324
Foundry and machine-shop products.....	.818	1,472	1,305	167	33,889	30,401	3,479	.540	.559	.377
Glass.....	.782	148	134	14	7,352	6,809	543	.551	.559	.453
Iron and steel.....	.965	265	250	15	46,853	43,022	3,831	.689	.701	.554
Leather.....	.710	172	155	17	4,706	3,922	784	.523	.549	.391
Lumber (sawmills).....	.560	680	383	297	45,266	17,948	27,318	.433	.617	.313
Meat packing.....	.737	265	220	45	15,991	14,622	1,369	.611	.627	.438
Paints and varnishes.....	.781	349	319	30	3,099	2,836	263	.576	.593	.389
Paper and pulp.....	.727	529	481	48	25,876	18,021	7,855	.541	.571	.473
Petroleum refining.....	1.030	149	99	50	5,427	3,130	2,297	.659	.715	.584
Rubber tires and inner tubes.....	1.048	31	(3)	(3)	607	(3)	(3)	.585	(3)	(3)
Soap.....	.784	83	(3)	(3)	1,404	(3)	(3)	.607	(3)	(3)
Public utilities.....	(2)	940	734	206	23,567	19,480	4,087	.502	.531	.365
Electric light and power.....	.919	467	350	117	9,490	7,215	2,284	.474	.509	.364
Electric street-railway and city motorbus operation and maintenance.....	.757	215	174	41	6,957	6,374	583	.547	.565	.359
Manufactured and natural gas.....	(2)	258	210	48	7,111	5,891	1,220	.495	.521	.370
Building construction.....	1.000	1,551	1,209	342	31,757	23,363	8,394	.648	.730	.421

¹ These are United States totals, based on monthly reports on employment and pay rolls collected by the Bureau.

² Not available.

³ Regional figures omitted to avoid disclosure of individual operations

Variations in Entrance Rates in Individual Industries

Table 6 presents, for each of the 20 industries surveyed, the cumulative percentage of common laborers receiving each specified entrance rate. It may be seen from this table that most of the common laborers in 18 of the industries were paid rates between 40.0 and 77.5 cents an hour. In fact, over 90 percent of all the common laborers in the cement, foundry and machine-shop products, glass, iron and steel, leather, meat-packing, and paper and pulp industries had rates falling within this 37.5-cent range. In only the lumber (sawmills) and fertilizer industries were less than 60 percent of the common laborers paid such entrance rates. In these two industries there were heavy concentrations at exactly 30 cents. In the former industry, slightly over four-tenths of the total were paid this rate and in the latter slightly less than one-half had such an hourly wage.

Nearly one-third of the common laborers in the building construction industry and about one-fifth of those in the petroleum refining and rubber tires and tubes industries were paid entrance rates of over 77.5 cents.

Of the 16 manufacturing industries, only the brick, tile, and terra cotta, fertilizer, foundry and machine-shop products, lumber (sawmills), and meat-packing industries reported any common laborers at entrance rates of less than 30 cents an hour. In only brick, tile, and terra cotta, and fertilizer were there as many as 1 percent receiving such a rate.

TABLE 6.—Cumulative Percentage Distribution of Adult Male Common Laborers, by Hourly Entrance Rates, Industry, and Region, July 1941

Hourly entrance rate (in cents)	Automobile parts ¹	Brick, tile, and terra cotta			Cement			Chemicals		
		Total	North and West	South and South-west	Total	North and West	South and South-west	Total	North and West	South and South-west
Under 30.0		2.8	0.2	11.7						
30.0 and under	0.6	14.2	1.2	58.8				0.6	0.5	0.7
Under 32.5	.6	14.9	1.2	61.8				.6	.5	.7
Under 35.0	.6	19.9	1.8	81.7	0.5		2.0	.8	.5	1.8
Under 37.5	8.6	21.4	3.3	83.5	.5		2.0	3.2	.6	14.4
Under 40.0	8.7	22.4	3.8	86.0	.5		2.0	3.3	.6	14.7
Under 42.5	17.3	28.4	10.6	89.3	3.2	0.6	10.5	5.5	.8	26.0
Under 47.5	23.0	38.4	23.1	90.8	14.0	.9	50.6	14.7	1.7	71.9
Under 52.5	35.9	55.6	44.3	94.1	28.6	5.5	93.2	22.1	5.2	96.5
Under 57.5	44.4	67.5	59.7	94.1	36.7	14.6	98.5	27.0	10.8	97.9
Under 62.5	48.2	76.1	70.8	94.1	51.2	33.7	100.0	37.5	23.2	99.9
Under 67.5	76.2	83.2	78.2	100.0	88.8	84.8		50.4	39.0	99.9
Under 72.5	82.0	97.6	96.9		98.5	97.9		70.4	63.7	99.9
Under 77.5	90.2	99.6	99.5		100.0	100.0		91.7	89.9	100.0
Under 82.5	* 100.0	100.0	100.0					97.4	96.8	
Under 90.0								100.0	100.0	

See footnotes at end of table.

TABLE 6.—Cumulative Percentage Distribution of Adult Male Common Laborers, by Hourly Entrance Rates, Industry, and Region, July 1941—Continued

Hourly entrance rate (in cents)	Fertilizer			Foundry and machine-shop products			Glass			Iron and steel		
	Total	North and West	South and South-west	Total	North and West	South and South-west	Total	North and West	South and South-west	Total	North and West	South and South-west
Under 30.0	3.1		4.3	0.1	(?)	0.9						
30.0 and under	50.0	8.2	66.5	3.6	0.4	31.4	2.6	0.4	30.7	0.1		0.9
Under 32.5	50.0	8.2	66.5	3.7	.5	31.9	2.6	.4	30.7	.1		.9
Under 35.0	50.5	8.5	67.1	3.8	.5	32.5	2.6	.4	31.3	.1		.9
Under 37.5	64.3	11.5	85.2	5.8	1.7	42.0	3.3	1.0	33.5	.2		2.3
Under 40.0	64.4	11.7	85.2	7.8	2.0	59.0	3.6	1.0	38.1	.2		2.3
Under 42.5	74.1	19.2	95.8	18.2	11.1	80.6	8.3	4.6	57.3	.7	0.3	5.7
Under 47.5	78.3	28.4	98.0	27.2	20.1	89.7	23.3	19.9	68.0	1.6	.7	12.5
Under 52.5	83.3	42.2	99.5	46.5	40.8	97.8	41.0	39.0	68.0	3.4	2.6	12.5
Under 57.5	89.3	62.4	100.0	58.8	54.3	98.9	49.9	48.4	71.9	13.4	7.4	80.9
Under 62.5	92.2	72.5		74.0	71.1	100.0	80.1	80.8	71.9	15.3	9.4	82.0
Under 67.5	98.5	94.9		86.8	85.3		92.7	92.7	93.6	23.6	17.4	92.8
Under 72.5	99.0	96.6		91.0	89.9		100.0	100.0	100.0	27.7	21.9	92.8
Under 77.5	99.1	96.9		99.2	99.1					99.3	99.3	100.0
Under 82.5	99.5	98.4		99.7	99.6					100.0	100.0	
Under 90.0	100.0	100.0		99.9	99.9							
Under 100.0				100.0	100.0							

Hourly entrance rate (in cents)	Leather			Lumber (sawmills)			Meat packing			Paints and varnishes		
	Total	North and West	South and South-west	Total	North and West	South and South-west	Total	North and West	South and South-west	Total	North and West	South and South-west
Under 30.0				0.8	0.3	1.1	0.5		5.5			
30.0 and under	1.3		7.5	41.9	5.2	66.1	2.8	0.2	30.3	3.2	0.4	32.8
Under 32.5	1.3		7.5	43.7	5.6	68.9	2.9	.2	31.0	3.3	.4	34.3
Under 35.0	1.3		7.5	56.8	6.5	90.0	3.0	.2	32.5	3.9	1.0	35.4
Under 37.5	6.6	1.0	34.3	62.7	8.8	98.2	4.3	.4	45.1	5.1	1.7	42.6
Under 40.0	6.6	1.0	34.3	63.4	9.5	98.9	4.3	.4	45.1	5.8	2.3	44.9
Under 42.5	26.9	15.5	83.7	65.6	14.3	99.3	5.2	1.3	46.3	13.2	8.5	65.8
Under 47.5	34.0	21.7	95.4	70.7	26.7	99.7	6.9	2.9	49.8	18.5	13.2	77.2
Under 52.5	41.4	30.2	97.4	71.4	27.9	100.0	17.6	14.0	57.0	38.1	32.5	100.0
Under 57.5	69.1	62.9	100.0	72.5	30.6		23.7	19.1	74.4	47.7	43.0	
Under 62.5	79.7	75.6		74.2	34.8		31.9	25.7	100.0	54.1	50.0	
Under 67.5	94.4	93.2		78.1	44.8		78.0	76.1		74.9	72.6	
Under 72.5	99.9	99.8		87.2	67.7		99.7	99.7		91.7	91.0	
Under 77.5	100.0	99.9		99.7	99.2		100.0	100.0		93.8	93.3	
Under 82.5		100.0		100.0	100.0					95.4	95.0	
Under 90.0										100.0	100.0	

Hourly entrance rate (in cents)	Paper and pulp			Petroleum refining			Rubber tires and inner tubes ¹	Soap ¹	Building construction		
	Total	North and West	South and South-west	Total	North and West	South and South-west			Total	North and West	South and South-west
Under 30.0									0.8	(?)	3.1
30.0 and under	(?)	(?)	(?)					1.4	5.1	0.1	19.1
Under 32.5	(?)	(?)	(?)					1.4	5.1	.1	19.1
Under 35.0	(?)	(?)	(?)					1.8	5.1	.1	19.2
Under 37.5	0.2	0.3	0.2	0.1		0.2	1.3	3.8	7.0	.4	25.8
Under 40.0	.2	.3	.2	.1		.2	1.3	4.3	7.1	.5	25.9
Under 42.5	8.3	5.6	14.8	.3	0.1	.6	6.1	6.7	19.1	4.3	60.8
Under 47.5	22.9	10.5	51.6	3.3	.4	7.3	21.1	15.2	20.8	6.4	61.3
Under 52.5	44.5	28.6	81.1	23.1	2.8	50.8	55.4	26.0	33.8	12.7	92.7
Under 57.5	70.1	57.0	100.0	30.5	5.7	64.3	60.5	39.7	36.2	14.5	96.8
Under 62.5	86.5	80.6		36.2	12.2	68.8	76.2	52.9	40.6	19.5	99.5
Under 67.5	89.8	85.3		41.3	17.5	73.6	76.2	62.6	53.3	36.6	99.7
Under 72.5	91.7	88.1		59.4	44.0	80.3	78.0	86.3	57.9	42.9	99.7
Under 77.5	100.0	100.0		82.8	83.3	82.1	82.0	90.1	67.6	56.0	100.0
Under 82.5				98.0	96.5	100.0	82.0	93.2	80.1	73.1	
Under 90.0				100.0	100.0		100.0	100.0	90.8	87.6	
Under 100.0									95.4	93.8	
Under 110.0									99.1	98.8	

See footnotes at end of table.

TABLE 6.—Cumulative Percentage Distribution of Adult Male Common Laborers, by Hourly Entrance Rates, Industry, and Region, July 1941—Continued

Hourly entrance rate (in cents)	Electric light and power			Electric street-railway and city motorbus operation and maintenance			Manufactured and natural gas		
	Total	North and West	South and Southwest	Total	North and West	South and Southwest	Total	North and West	South and Southwest
Under 30.0	1.0	0.1	4.2	0.1		1.7	0.5		2.7
30.0 and under	10.4	.7	41.5	.9	(³)	10.7	4.8	0.3	26.7
Under 32.5	10.5	.7	42.0	1.3	0.1	14.4	5.2	.3	28.9
Under 35.0	10.6	.7	42.6	2.4	.8	20.6	5.7	.3	31.5
Under 37.5	14.0	2.1	52.3	11.0	4.2	85.3	9.6	1.1	50.5
Under 40.0	15.2	2.5	55.8	14.8	8.2	86.1	10.1	1.3	52.1
Under 42.5	41.5	30.2	77.8	24.2	17.4	97.5	27.8	15.7	85.7
Under 47.5	48.5	34.3	94.1	29.7	23.3	99.5	38.9	28.1	90.4
Under 52.5	71.5	63.0	99.3	45.3	40.3	99.5	69.2	63.0	100.0
Under 57.5	80.0	73.8	99.9	56.1	52.1	99.5	78.3	73.9	
Under 62.5	86.3	82.0	100.0	66.9	63.9	99.5	82.4	78.9	
Under 67.5	95.3	93.8		72.6	70.1	100.0	94.8	93.8	
Under 72.5	99.0	98.6		93.6	93.0		99.3	99.2	
Under 77.5	99.8	99.7		99.5	99.4		99.5	99.4	
Under 82.5	100.0	100.0		99.9	99.9		99.7	99.6	
Under 90.0				100.0	100.0		99.7	99.6	
Under 100.0							100.0	100.0	
Under 110.0									

¹ Regional figures not shown, in order not to reveal plant identity.² Includes less than a tenth of 1 percent receiving 82.5 cents and over.³ Less than a tenth of 1 percent.⁴ Includes less than a tenth of 1 percent receiving 77.5 cents and over.⁵ The remaining nine-tenths of 1 percent received \$1.10 and over.⁶ The remaining one and two-tenths percent received \$1.10 and over.

Hourly Entrance Rates by City

SIZE OF CITY

That average hourly entrance rates of pay of common laborers tend to vary with size of city may be seen from table 7. For the country as a whole, cities having a population of 500,000 and over averaged close to 66 cents, while groups of cities of under 10,000 averaged from 48 to 52 cents. Between these two extremes there are groups of cities with populations of from 10,000 to 500,000, wherein the averages vary from 55.0 to 58.7 cents. These show a slight irregularity in sequence of average rates in relation to size of city. The average for any one of these groups of cities is, however, materially below that for cities of 500,000 and over.

In the North and West region, the correlation between size of city and average hourly entrance rate shows the same tendency as stated for the country as a whole. In this region the averages range from approximately 66 cents in cities of 500,000 and over to around 58 to 59 cents for cities under 10,000. Cities of from 10,000 to 500,000 have group averages from 61.8 to 63.5 cents.

In the South and Southwest region there is no city having a population as great as 500,000. In this region groups of cities of 10,000 and under 500,000, with one exception, paid entrance rates averaging higher than in cities of less than 10,000. The exception is that cities

of 5,000 and under 10,000 show a group average higher than those in the class of 50,000 and under 100,000, the respective figures being 39.2 and 36.1 cents. The highest average was 48.4 cents in cities of 25,000 and under 50,000, and the lowest 33.7 cents in cities of 2,500 and under 5,000, making a difference of 14.7 cents between the highest and lowest figures. This may be compared with 8.5 cents in the North and West.

TABLE 7.—Average Hourly Entrance Rates of Adult Male Common Laborers in 20 Industries, by Size of City, July 1941

Size of city	United States			North and West			South and Southwest		
	Number of establishments	Number of common laborers at entrance rates	Average hourly entrance rate	Number of establishments	Number of common laborers at entrance rates	Average hourly entrance rate	Number of establishments	Number of common laborers at entrance rates	Average hourly entrance rate
All cities.....	7,834	278,906	\$0.564	6,284	209,305	\$0.623	1,550	69,601	\$0.384
1,000,000 and over.....	753	26,670	.657	753	26,670	.657			
500,000 and under 1,000,000.....	610	21,547	.661	610	21,547	.661			
250,000 and under 500,000.....	881	23,141	.558	594	14,680	.634	287	8,461	.425
100,000 and under 250,000.....	987	26,671	.577	728	20,085	.635	259	6,586	.398
50,000 and under 100,000.....	728	28,052	.550	534	19,839	.628	194	8,213	.361
25,000 and under 50,000.....	772	26,266	.586	626	19,898	.618	146	6,368	.484
10,000 and under 25,000.....	945	40,039	.587	786	33,411	.623	159	6,628	.401
5,000 and under 10,000.....	551	21,351	.520	419	13,585	.593	132	7,766	.392
2,500 and under 5,000.....	412	14,607	.495	326	9,364	.583	86	5,243	.337
Less than 2,500.....	994	41,292	.480	741	23,900	.576	253	17,392	.347
City not reported.....	201	9,270	.508	167	6,326	.589	34	2,944	.333

RATES IN INDIVIDUAL CITIES

Although common laborers in cities having a population of 500,000 and over as a whole had the highest average entrance rates, a number of smaller cities had averages in excess of some of those in the 500,000-and-over group. As may be seen from table 8, Seattle, Wash., ranking twenty-second in size in the country, had rates that averaged 79.5 cents. Among the 4 cities with the highest averages (Seattle, Detroit, Portland (Oreg.), and San Francisco), 2 had populations of less than 500,000. The average of 67.9 cents for Toledo, Ohio, with a population of around 300,000, was considerably higher than that of 62.7 cents for New York City. In fact, the New York City average was lower than that for 20 other cities having a smaller population.

Among the various cities, individual averages showed a wide range. For example, in the group of 23 cities having populations of 250,000 and under 500,000, there was a 44-cent difference as the average for Atlanta, Ga., amounted to 35.5 cents while that for Seattle, already noted, was 79.5 cents. In the group of 500,000 and under 1,000,000, the lowest average was 61.2 cents for Boston and the highest 70.2

cents for San Francisco. For the cities of 1,000,000 and over the highest average was 73.7 cents for Detroit, and the lowest was 62.7 cents for New York.

TABLE 8.—Average Hourly Entrance Rates of Adult Male Common Laborers, in Selected Cities, July 1941

Cities	Number of industries reported	Laborers at entrance rates	Average hourly entrance rate
1,000,000 and over.....	20	26,670	\$0.657
Chicago, Ill.....	19	12,389	.654
Detroit, Mich.....	16	3,182	.737
Los Angeles, Calif.....	17	3,938	.642
New York, N. Y.....	17	2,513	.627
Philadelphia, Pa.....	17	4,648	.640
500,000 and under 1,000,000.....	19	21,547	.661
Baltimore, Md.....	15	4,753	.628
Boston, Mass.....	12	691	.612
Buffalo, N. Y.....	13	1,221	.627
Cleveland, Ohio.....	14	3,675	.680
Milwaukee, Wis.....	13	1,246	.664
Pittsburgh, Pa.....	13	3,523	.686
St. Louis, Mo.....	16	2,952	.655
San Francisco, Calif.....	14	1,818	.702
Washington, D. C.....	8	1,702	.650
250,000 and under 500,000.....	20	23,141	.558
Atlanta, Ga.....	11	1,162	.355
Birmingham, Ala.....	10	1,862	.480
Cincinnati, Ohio.....	15	1,390	.588
Columbus, Ohio.....	9	1,056	.508
Dallas, Tex.....	7	707	.422
Denver, Colo.....	12	914	.569
Houston, Tex.....	10	1,144	.445
Indianapolis, Ind.....	14	1,067	.520
Jersey City, N. J.....	10	773	.638
Kansas City, Mo.....	7	1,205	.682
Louisville, Ky.....	10	794	.466
Memphis, Tenn.....	11	1,011	.395
Minneapolis, Minn.....	7	465	.671
Newark, N. J.....	11	1,013	.574
New Orleans, La.....	11	1,011	.436
Oakland, Calif.....	12	1,032	.660
Portland, Oreg.....	12	868	.731
Providence, R. I.....	6	263	.603
Rochester, N. Y.....	6	99	.522
St. Paul, Minn.....	11	2,212	.606
San Antonio, Tex.....	8	776	.401
Seattle, Wash.....	13	1,294	.736
Toledo, Ohio.....	14	995	.679

DIFFERENCES BY INDUSTRY AND CITY

The averages presented in table 9 for 4 manufacturing industries, 3 public utilities combined, and the building-construction industry, in 37 cities having a population of 250,000 or more, indicate that there is little relationship among the averages of entrance rates paid to common laborers in these industries within the same city. They further indicate that the cities with the highest general averages for all industries surveyed do not always have the highest average rates by individual industry. A good illustration of this fact appears in the figures for Pittsburgh. With a general average of 68.6 cents, it ranks sixth among the various city averages. The average for the meat-packing industry in this city, however, ranked tenth, and that

for the building-construction industry seventeenth. Similar conditions prevail with reference to the other cities. With reference to the relationship among industry averages within the same city, it will be seen that average hourly entrance rates in Cleveland varied by 39.2 cents, from 58.3 cents in foundry and machine-shop products to 97.5 cents in building construction. In Detroit, a difference of 15.1 cents existed between the average of 63.3 cents in paints and varnishes and that of 78.4 cents in building construction.

TABLE 9.—Average Hourly Entrance Rates of Adult Male Common Laborers for Selected Industries, by Specified Cities, July 1941

Cities	All industries		Foundry and machine-shop products		Iron and steel		Paints and varnishes	
	Laborers at entrance rates	Average hourly entrance rate	Laborers at entrance rates	Average hourly entrance rate	Laborers at entrance rates	Average hourly entrance rate	Laborers at entrance rates	Average hourly entrance rate
United States.....	278,906	\$0.564	33,889	\$0.540	46,853	\$0.689	3,099	\$0.576
1,000,000 and over:								
Chicago, Ill.....	12,389	.654	2,373	.597	2,519	.563	456	.635
Detroit, Mich.....	3,182	.737	303	.709	353	.713	71	.633
Los Angeles, Calif.....	3,938	.642	352	.551	57	.613	143	.547
New York, N. Y.....	2,513	.627	723	.532	(2)	(2)	366	.555
Philadelphia, Pa.....	4,648	.640	436	.544	301	.639	91	.561
500,000 and under 1,000,000:								
Baltimore, Md.....	4,753	.628	212	.473	(2)	(2)	(2)	(2)
Boston, Mass.....	691	.612	213	.524	(2)	(2)	(2)	(2)
Buffalo, N. Y.....	1,221	.627	168	.568	(2)	(2)	(2)	(2)
Cleveland, Ohio.....	3,675	.689	819	.583	713	.723	104	.609
Milwaukee, Wis.....	1,246	.664	354	.541	198	.622	(2)	(2)
Pittsburgh, Pa.....	3,523	.686	517	.690	1,868	.725	(2)	(2)
St. Louis, Mo.....	2,952	.655	535	.544	(2)	(2)	(2)	(2)
San Francisco, Calif.....	1,818	.702	726	.662	(2)	(2)	(2)	(2)
Washington, D. C.....	1,702	.650						
250,000 and under 500,000:								
Atlanta, Ga.....	1,162	.355	79	.341	(2)	(2)	(2)	(2)
Birmingham, Ala.....	1,862	.460	607	.376	737	.550	(2)	(2)
Cincinnati, Ohio.....	1,390	.588	165	.496			(2)	(2)
Columbus, Ohio.....	1,056	.508	273	.552			(2)	(2)
Dallas, Tex.....	707	.422	103	.374			(2)	(2)
Denver, Colo.....	914	.564	156	.507	(2)	(2)	(2)	(2)
Houston, Tex.....	1,144	.445	300	.492	(2)	(2)	(2)	(2)
Indianapolis, Ind.....	1,067	.523	224	.588	(2)	(2)	56	.425
Jersey City, N. J.....	773	.653	92	.510	(2)	(2)	(2)	(2)
Kansas City, Mo.....	1,205	.662	125	.500	(2)	(2)	(2)	(2)
Louisville, Ky.....	794	.466	129	.446			80	.466
Memphis, Tenn.....	1,011	.395	(2)	(2)			(2)	(2)
Minneapolis, Minn.....	465	.671	180	.523			(2)	(2)
Newark, N. J.....	1,013	.574	91	.534	(2)	(2)	114	.570
New Orleans, La.....	1,011	.436	151	.426			(2)	(2)
Oakland, Calif.....	1,032	.660	465	.722	(2)	(2)	(2)	(2)
Portland, Oreg.....	868	.731	90	.723	(2)	(2)	(2)	(2)
Providence, R. I.....	263	.663	(2)	(2)			(2)	(2)
Rochester, N. Y.....	99	.552	(2)	(2)				
St. Paul, Minn.....	2,212	.636	284	.565			(2)	(2)
San Antonio, Tex.....	776	.401	(2)	(2)				
Seattle, Wash.....	1,294	.795	177	.757	(2)	(2)	(2)	(2)
Toledo, Ohio.....	995	.679	172	.594			(2)	(2)

See footnotes at end of table.

TABLE 9.—Average Hourly Entrance Rates of Adult Male Common Laborers for Selected Industries, by Specified Cities, July 1941—Continued

Cities	Meat packing		Public utilities ¹		Building construction	
	Laborers at entrance rates	Average hourly entrance rate	Laborers at entrance rates	Average hourly entrance rate	Laborers at entrance rates	Average hourly entrance rate
United States.....	15,991	\$0.611	23,567	\$0.502	31,757	\$0.648
1,000,000 and over:						
Chicago, Ill.....	2,923	.602	2,520	.670	421	.885
Detroit, Mich.....	(²)	(²)	357	.678	1,538	.784
Los Angeles, Calif.....	768	.657	625	.523	1,308	.721
New York, N. Y.....	232	.661	390	.641	510	.792
Philadelphia, Pa.....	312	.563	276	.453	1,210	.771
500,000 and under 1,000,000:						
Baltimore, Md.....	133	.529	(²)	(²)	1,464	.625
Boston, Mass.....	(²)	(²)	132	.628	146	.843
Buffalo, N. Y.....	(²)	(²)	(²)	(²)	313	.742
Cleveland, Ohio.....	97	.634	(²)	(²)	600	.975
Milwaukee, Wis.....	(²)	(²)	87	.524	433	.848
Pittsburgh, Pa.....	105	.584	790	.622	96	.714
St. Louis, Mo.....	439	.649	(²)	(²)	545	.871
San Francisco, Calif.....	74	.668	193	.559	488	.823
Washington, D. C.....	(²)	(²)	332	.492	1,271	.707
250,000 and under 500,000:						
Atlanta, Ga.....	(²)	(²)	(²)	(²)	287	.364
Birmingham, Ala.....	(²)	(²)	(²)	(²)	145	.440
Cincinnati, Ohio.....	(²)	(²)	(²)	(²)	399	.690
Columbus, Ohio.....	280	.499	(²)	(²)	66	.611
Dallas, Tex.....	75	.422	168	.396	345	.447
Denver, Colo.....	293	.639	(²)	(²)	148	.690
Houston, Tex.....	(²)	(²)	(²)	(²)	403	.408
Indianapolis, Ind.....	75	.553	247	.477	109	.650
Jersey City, N. J.....	(²)	(²)	(²)	(²)	(²)	(²)
Kansas City, Mo.....	(²)	(²)	(²)	(²)	339	.798
Louisville, Ky.....	(²)	(²)	(²)	(²)	282	.546
Memphis, Tenn.....	(²)	(²)	(²)	(²)	92	.313
Minneapolis, Minn.....	(²)	(²)	(²)	(²)	189	.894
Newark, N. J.....	(²)	(²)	(²)	(²)	103	.594
New Orleans, La.....	(²)	(²)	(²)	(²)	468	.489
Oakland, Calif.....	(²)	(²)	341	.554	(²)	(²)
Portland, Oreg.....	(²)	(²)	71	.634	360	.765
Providence, R. I.....	(²)	(²)	(²)	(²)	198	.691
Rochester, N. Y.....	(²)	(²)	(²)	(²)	(²)	(²)
St. Paul, Minn.....	1,226	.679	(²)	(²)	306	.708
San Antonio, Tex.....	52	.397	(²)	(²)	385	.429
Seattle, Wash.....	79	.651	102	.680	406	.939
Toledo, Ohio.....	(²)	(²)	100	.500	237	.811

¹ Includes data for electric light and power, electric street-railway and city motorbus operation and maintenance, and manufactured and natural-gas industries.

² Because of small coverage, no data are presented.

Entrance Rates in Identical Establishments, 1940 and 1941

For the purpose of indicating changes in entrance rates from 1940 to 1941, probably the most satisfactory figures are those for identical plants which reported in both years.

The number of common laborers at entrance rates in the 5,320 establishments reporting in both years increased from 180,063 to 225,032, or about 25 percent.

An examination of the averages in table 10 for the 20 industries combined, for the country as a whole, reveals an increase of 6.6 cents an hour in average entrance rates between 1940 and 1941, the respective figures being 51.1 and 57.7 cents. Every industry surveyed shared in

this increase. The manufacturing group reported rates averaging 57.6 cents in 1941, as compared with 50.7 cents in 1940. In the public-utilities group and in the building construction industry, the averages increased 2.8 and 5.3 cents, respectively, rising from 48.1 to 50.9 cents in public utilities and from 59.5 to 64.8 cents in the building-construction industry. The most outstanding increase among all the individual industries occurred in iron and steel, where the average rose from 59.1 cents in 1940 to 68.9 cents in 1941. Common laborers in electric light and power plants showed the smallest increase in average entrance rates, 1.7 cents an hour. Industries other than iron and steel and building construction, wherein average entrance rates increased more than 5 cents an hour between the 2 years are brick, tile, and terra cotta (5.9 cents), cement (5.7 cents), chemicals (6.7 cents), foundry and machine-shop products (5.5 cents), lumber (sawmills) (6.1 cents), meat packing (5.1 cents), paints and varnishes (5.9 cents), paper and pulp (5.7 cents), and soap (7.4 cents).

Regional averages moved upward in all industries with the exception of those for leather and electric light and power in the South and Southwest. In this area the averages for these two industries decreased 1.8 and 2.0 cents an hour, respectively.⁴

The greatest increase in average hourly entrance rates in the North and West between the 2 years occurred in the iron and steel and lumber (sawmills) industries. The increases in both industries amounted to nearly 10 cents. The smallest change in this area was for manufactured and natural gas, where an increase of 1.2 cents is shown.

Among the industry averages in the South and Southwest region, the greatest increase by far took place in the iron and steel industry. The average entrance rate here amounted to 55.5 cents in 1941 as against 44.1 cents in 1940. Increases in averages amounting to 4 cents or more also occurred in the cement, chemicals, paints and varnishes, paper and pulp, and building-construction industries. In the remaining industries, other than leather, and electric light and power, average entrance rates increased in varying amounts from 1.3 cents in fertilizer to 3.9 cents in meat packing.

⁴ The decreases in the averages for the leather and the electric light and power industries did not result from reductions in rates since 1940 but rather from a shift of the number of employees at each entrance rate. In the leather industry no establishments reported lower entrance rates for common laborers in 1941 than those shown for 1940. In the electric light and power industry in 1941, only 3 establishments with a total of fewer than 20 common laborers at entrance rates reported lower rates than in 1940. A few other plants, while continuing in 1941 to employ workers at the 1940 rates or higher, also reported common laborers at lower rates than were in effect in the earlier year.

TABLE 10.—Average Hourly Entrance Rates of Adult Male Common Laborers, by Industry and Region, July 1940 and July 1941

Industry	Total				North and West				South and Southwest			
	Identical establishments			All establishments 1941	Identical establishments			All establishments 1941	Identical establishments			All establishments 1941
	1940	1941	Per cent of change		1940	1941	Per cent of change		1940	1941	Per cent of change	
All 20 industries.....	\$0.511	\$0.577	+12.9	\$0.564	\$0.562	\$0.629	+11.9	\$0.623	\$0.358	\$0.399	+11.5	\$0.384
Manufacturing.....	.507	.576	+13.6	.558	.557	.628	+12.7	.619	.357	.398	+11.5	.380
Automobile parts.....	.567	.600	+5.8	.584	(1)	(1)	(1)	(1)				(1)
Brick, tile, terra cotta.....	.449	.508	+13.1	.504	.484	.556	+14.9	.552	.306	.335	+9.5	.339
Cement.....	.529	.586	+10.8	.589	.568	.630	+10.9	.629	.430	.472	+9.8	.474
Chemicals.....	.572	.639	+11.7	.637	.620	.686	+10.6	.680	.391	.443	+13.3	.446
Fertilizers.....	.372	.390	+4.8	.384	.496	.536	+8.1	.535	.317	.330	+4.1	.324
Foundry and machine-shop products.....	.487	.542	+11.3	.540	.507	.562	+10.8	.559	.346	.378	+9.2	.377
Glass.....	.530	.554	+4.5	.551	.538	.563	+4.6	.559	.442	.457	+3.4	.453
Iron and steel.....	.591	.689	+16.6	.689	.604	.702	+16.2	.701	.441	.555	+25.9	.554
Leather.....	.511	.532	+4.1	.523	.527	.561	+6.5	.549	.409	.391	-4.4	.391
Lumber (saw-mills).....	.413	.474	+14.8	.433	.545	.640	+17.4	.617	.301	.315	+4.7	.313
Meat packing.....	.570	.621	+8.9	.611	.585	.633	+8.2	.627	.424	.463	+9.2	.458
Paints and varnishes.....	.524	.583	+11.3	.567	.541	.606	+12.0	.593	.346	.393	+13.6	.389
Paper and pulp.....	.486	.543	+11.7	.541	.523	.573	+9.6	.571	.404	.470	+16.3	.473
Petroleum refining.....	.633	.665	+5.1	.659	.675	.719	+6.5	.715	.570	.589	+3.3	.584
Rubber tires and inner tubes.....	(2)	(2)	(2)	.585	(2)	(2)	(2)	(1)				(1)
Soap.....	.538	.612	+13.8	.607	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Public utilities.....	.481	.509	+5.8	.502	.510	.537	+5.3	.531	.360	.367	+1.9	.365
Electric light and power.....	.465	.482	+3.7	.474	.490	.517	+5.5	.509	.385	.365	-5.2	.364
Electric street-railway and city motorbus operation and maintenance.....	.506	.551	+8.9	.547	.528	.567	+7.4	.565	.324	.356	+9.9	.359
Manufactured and natural gas.....	.475	.497	+4.6	.495	.513	.525	+2.3	.521	.344	.375	+9.0	.370
Building construction.....	.595	.648	+8.9	.648	.678	.737	+8.7	.730	.369	.430	+16.5	.421

¹ Regional figures omitted to avoid disclosure of individual operations.

² In 1940, 21 establishments in the rubber-tire industry, having a total employment of about 18,500 workers of all skills, reported 396 common laborers at entrance rates. These laborers had an average entrance rate of 51.7 cents per hour. It is believed that this average does not reflect the true average rate for the industry generally, as 14 plants, employing about 27,000, reported no common laborers at entrance rates. Of these plants 7, with a total employment of about 21,000, had entrance rates for common labor well above the 51.7-cent average, the range for such rates being from 55 to 75 cents per hour. For this reason, no comparison of identical plants is made between 1940 and 1941.

Table 11 shows the changes which have occurred between 1940 and 1941 in the proportionate distribution of common laborers at various entrance rates in identical establishments, the result of which increased the average for all common laborers 6.6 cents an hour. The distributions reveal that between 1940 and 1941, in the country as a whole, the percentages of common laborers with entrance rates of 30.0 cents and under, under 40.0 cents, and under 67.5 cents have materially decreased, being 7.7, 13.0, and 66.3 in 1941, as compared with 13.9, 19.0, and 94.1, respectively, in 1940. The greatest shift in the upper wage brackets between the 2 years occurred among those paid rates of 72.5 and under 77.5 cents an hour. In 1940 only 1.5 percent of all

common laborers reported had such rates, while in 1941, 20.7 percent of the total fell in this class.

The distributions by region show that in the North and West there has been a great change between the 2 years in the proportion of common laborers having entrance rates of 42.5 and under 72.5 cents an hour, and in the South and Southwest among those receiving 30.0 and under 57.5 cents an hour. In the former region 83.9 percent of the common laborers had entrance rates of 42.5 and under 72.5 cents, whereas in 1941 this percentage had been reduced to 61.7. On the other hand, 32.2 percent had entrance rates of 72.5 cents and over in 1941, as against 4.7 percent in 1940.

In the South and Southwest the percentage of common laborers with entrance rates of 30.0 cents an hour and under decreased from 53.4 to 32.5. Conversely, the percentage paid over 30.0 and under 57.5 cents materially increased from 1940 to 1941. In 1940, 44.1 percent had such rates, whereas in 1941 as many as 62.9 percent received such hourly wages.

TABLE 11.—Cumulative Percentage Distribution of Adult Male Common Laborers in 20 Industries, by Hourly Entrance Rates and Region, July 1940 and July 1941

Hourly entrance rate	Total			North and West			South and Southwest		
	Identical establishments		All establishments, 1941	Identical establishments		All establishments, 1941	Identical establishments		All establishments, 1941
	1940	1941		1940	1941		1940	1941	
Under 30.0 cents	0.7	0.3	0.4	(1)	(1)	(1)	2.9	1.2	1.7
30.0 cents and under	13.9	7.7	10.2	0.9	0.4	0.7	53.4	32.5	39.0
Under 32.5 cents	14.2	8.1	10.6	1.0	.4	.8	54.3	34.0	40.3
Under 35.0 cents	14.8	10.4	13.0	1.2	.5	.9	55.9	43.9	49.5
Under 37.5 cents	17.6	12.5	15.7	2.3	1.1	1.8	64.1	51.0	57.4
Under 40.0 cents	19.0	13.0	16.3	3.4	1.3	2.1	66.6	52.5	58.8
Under 42.5 cents	27.9	19.0	23.0	11.4	6.1	7.5	78.1	62.4	69.5
Under 47.5 cents	36.8	25.4	29.1	19.0	11.4	12.9	91.1	72.6	77.7
Under 52.5 cents	49.5	36.8	40.7	34.2	22.0	24.5	96.0	86.7	88.8
Under 57.5 cents	61.3	46.3	49.8	49.4	31.7	34.2	97.5	95.4	96.3
Under 62.5 cents	72.6	54.3	57.5	64.3	41.6	44.1	97.9	96.8	97.5
Under 67.5 cents	94.1	66.3	69.1	92.5	56.9	59.1	99.2	98.2	98.6
Under 72.5 cents	96.3	74.8	76.7	95.3	67.8	69.2	99.4	98.6	98.9
Under 77.5 cents	97.8	95.5	95.2	97.1	94.5	93.7	100.0	99.2	99.4
Under 82.5 cents	98.8	97.8	97.5	98.5	97.2	96.6	-----	100.0	100.0
Under 90.0 cents	99.5	99.1	99.0	99.4	98.9	98.6	-----	-----	-----
Under 100.0 cents	99.9	99.6	99.5	99.9	99.5	99.3	-----	-----	-----
Under 110.0 cents	² 100.0	² 100.0	³ 99.9	² 100.0	² 100.0	³ 99.9	-----	-----	-----

¹ Less than a tenth of 1 percent.

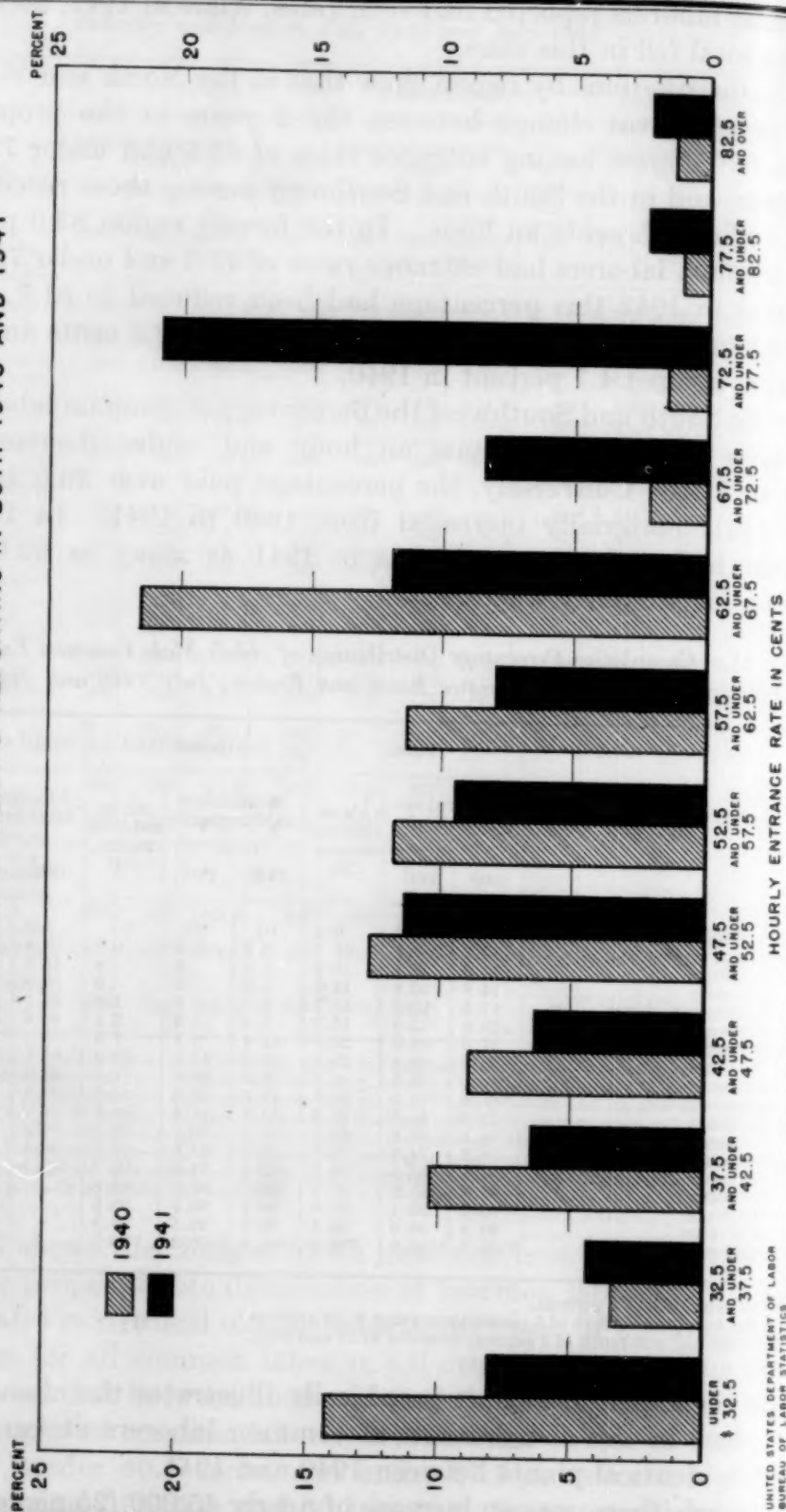
² Includes less than a tenth of 1 percent receiving \$1.10 and over.

³ The remaining one-tenth of 1 percent received \$1.10 and over.

The accompanying chart graphically illustrates the changes which took place in the distributions of common laborers at various wage levels in identical plants between 1940 and 1941.

Although there was an increase of nearly 45,000 (25 percent) in the number of common laborers reported at entrance rates in 1941 over 1940 in identical establishments for the country as a whole, the increase in the volume of employment of such workers was not of equal

PERCENTAGE DISTRIBUTION OF ADULT MALE COMMON LABORERS BY HOURLY ENTRANCE RATES IN PLANTS REPORTING IN BOTH 1940 AND 1941



extent among the several States. As may be seen in table 12, the number of common laborers working at entrance rates in 1941 was less than in the same establishments in 1940 in Arizona, Arkansas, the District of Columbia, Idaho, New Hampshire, New Mexico, Tennessee, Utah, and Wyoming. The greatest numerical increases among the several States were 2,805 in Alabama, 5,653 in Illinois, 6,427 in Ohio, and 5,307 in Pennsylvania.

TABLE 12.—Average Hourly Entrance Rates of Adult Male Common Laborers, by State and Region, July 1940 and July 1941

Region and State	Number of identical establishments reporting in both 1940 and 1941	Number of laborers at entrance rates in identical establishments		Average hourly entrance rate for common laborers in identical establishments		
		1940	1941	1940	1941	Percent of change
United States.....	5,320	180,063	225,032	\$0.511	\$0.577	+12.9
North and West.....	4,261	135,534	174,133	.562	.629	+11.9
California.....	295	8,281	10,851	.587	.650	+10.7
Colorado.....	50	1,081	1,277	.554	.617	+11.4
Connecticut.....	94	1,582	2,295	.548	.632	+15.3
Delaware.....	30	631	1,509	.488	.527	+8.0
District of Columbia.....	45	1,628	1,455	.639	.628	-1.7
Idaho.....	19	803	690	.579	.682	+17.8
Illinois.....	304	11,818	17,471	.586	.647	+10.4
Indiana.....	199	11,126	11,844	.571	.644	+12.8
Iowa.....	86	2,993	4,485	.540	.603	+11.7
Kansas.....	87	1,459	1,487	.468	.527	+12.6
Maine.....	65	2,295	2,425	.476	.528	+10.9
Maryland.....	86	3,877	5,764	.495	.590	+19.2
Massachusetts.....	199	3,127	4,162	.534	.574	+7.5
Michigan.....	254	6,911	9,143	.561	.616	+9.8
Minnesota.....	97	3,722	4,468	.562	.603	+7.3
Missouri.....	120	2,995	4,237	.562	.624	+11.0
Montana.....	22	613	699	.580	.635	+9.5
Nebraska.....	34	661	773	.500	.550	+10.0
Nevada.....	6	144	149	.596	.595	-.2
New Hampshire.....	35	982	956	.504	.508	+.8
New Jersey.....	183	4,931	6,097	.557	.616	+10.6
New York.....	294	7,860	9,397	.535	.582	+8.8
North Dakota.....	12	163	197	.422	.425	+.7
Ohio.....	517	13,991	20,418	.575	.652	+13.4
Oregon.....	118	4,367	4,974	.603	.696	+15.4
Pennsylvania.....	469	20,394	25,701	.558	.643	+15.2
Rhode Island.....	30	299	490	.530	.626	+18.1
South Dakota.....	10	343	349	.504	.554	+9.9
Utah.....	28	708	691	.490	.533	+8.8
Vermont.....	21	379	394	.439	.469	+6.8
Washington.....	173	6,076	7,502	.629	.736	+17.0
West Virginia.....	79	4,494	6,198	.550	.589	+7.1
Wisconsin.....	191	4,718	5,505	.541	.584	+7.9
Wyoming.....	9	82	80	(1)	(1)	(1)
South and Southwest.....	1,059	44,529	50,899	.358	.399	+11.5
Alabama.....	79	4,078	6,883	.404	.485	+20.0
Arizona.....	17	483	351	.394	.415	+5.3
Arkansas.....	55	4,151	3,577	.327	.359	+9.8
Florida.....	68	3,883	4,079	.325	.332	+2.2
Georgia.....	91	3,779	4,359	.320	.349	+9.1
Kentucky.....	56	1,259	1,949	.442	.529	+19.7
Louisiana.....	83	6,452	7,189	.362	.405	+11.9
Mississippi.....	22	1,159	1,232	.349	.351	+.6
New Mexico.....	10	155	121	.368	.363	-1.4
North Carolina.....	87	2,704	2,889	.309	.331	+7.1
Oklahoma.....	60	1,173	1,210	.487	.483	-.8
South Carolina.....	47	2,483	2,910	.317	.327	+3.2
Tennessee.....	85	3,116	3,035	.343	.398	+16.0
Texas.....	181	6,494	7,479	.391	.421	+7.7
Virginia.....	118	3,160	3,636	.361	.391	+8.3

¹ Because of small coverage, no average or percent of change is presented.

When the 1941 State averages for plants reporting for both 1940 and 1941 are compared with those referring to all establishments in 1941, there are some slight differences. In a few States the amounts are in excess of 2 cents, the greatest being 4.2 cents in New Mexico and 3.6 cents in Nebraska and Oklahoma. In 25 States the differences were 1 cent or less and in 12 States between 1 and 2 cents.

In the North and West, 5 States showed increases in average hourly entrance rates for common laborers of from 9 to 11 cents an hour between the 2 years. The State of Washington had the greatest actual increase (10.7 cents) in the North and West region. The Nevada and District of Columbia averages were slightly lower in 1941 than in 1940 as reported by identical establishments. In the South and Southwest States the most notable increases in average entrance rates between 1940 and 1941 were 8.1 and 8.7 cents, respectively, in Alabama and Kentucky. Small decreases occurred in Oklahoma and New Mexico.

Trends Reflected by Entrance Rates During the 16-Year Period, 1926-41

The trend since 1926 in average hourly entrance rates paid to adult male common laborers in 9 manufacturing industries, 3 public utilities, and the building-construction industry, as well as for the 13 industries combined, is shown in table 13. Included in the manufacturing group are brick, tile, and terra cotta, cement, foundry and machine-shop products, iron and steel, leather, lumber (sawmills), meat packing, paper and pulp, and petroleum refining. Data for 7 other industries included in the 1936 and later studies are omitted in order to retain comparability throughout the series.

With the exception of 1937 and 1938, averages for each year include data for all reporting establishments. Those for 1937 and 1938 are calculated on the basis of identical establishments. Although identical establishments were not used in computing averages for all the years, the figures presented may generally be accepted as indicative of the trend.⁵

The 1941 average for the 13 industries combined amounted to 56.5 cents, which represents an increase of 5.8 cents over that for 1940. The manufacturing industries show an increase of approximately the same amount. The smallest advance (2.5 cents) occurred in the public utilities group. In the building-construction industry, the 1941 average is 4.7 cents greater than that for 1940. In each instance the 1941 figures are higher than those shown for any year since 1926 when the Bureau studies of entrance rates of common laborers began.

⁵ See Monthly Labor Review for December 1937 (p. 1508, footnote 6).

TABLE 13.—Average Hourly Entrance Rates of Adult Male Common Laborers in 13 Industries, by Industry Group, 1926-41

July	All industries covered	9 manu- facturing industries	3 public utilities	Building con- struction ¹
1926.....	\$0. 426	\$0. 401	\$0. 420	\$0. 471
1927.....	. 424	. 399	. 398	. 482
1928.....	. 428	. 402	. 429	. 474
1929.....	. 432	. 407	. 428	. 483
1930.....	. 429	. 405	. 446	. 470
1931.....	. 403	. 383	. 446	. 426
1932.....	. 355	. 318	. 415	. 399
1933.....	. 333	. 305	. 387	. 383
1934.....	. 420	. 407	. 418	. 455
1935.....	. 430	. 415	. 420	. 481
1936.....	. 434	. 425	. 437	. 509
1937 ².....	. 493	. 488	. 463	. 551
1938 ³.....	. 495	. 486	. 479	. 578
1939.....	. 500	. 487	. 485	. 601
1940.....	. 507	. 498	. 477	. 601
1941.....	. 565	. 559	. 502	. 648

¹ For the years 1926 to 1935, inclusive, the figures cover a small amount of construction outside of the building industry.

² Averages for the year were computed on the basis of identical establishments for both 1937 and 1938.

³ Averages for the year were computed on the basis of identical establishments for both 1938 and 1939.

UNION WAGES AND HOURS IN THE BAKING INDUSTRY, JUNE 1, 1941¹

Summary

THE average hourly rate for union members in the baking industry on June 1, 1941, was 76.9 cents. About three-fourths of the union members had rates between 40 and 90 cents, almost one-third had rates between 70 and 90 cents, and approximately one-fifth had scales of \$1.00 or more. Organized workers in Hebrew bakeries received the highest hourly rate, on the average (\$1.279), while those in the pie and pastry branch had the lowest average rate (\$0.533).

Over 57 percent of the union members received increases in rates during the period June 1, 1940, to June 1, 1941, advancing the general level of wages 3.3 percent. The pie and pastry branch, with an increase of 7.2 percent, reported the greatest change.

The 40-hour week was predominant in the industry, 69 percent of the union members having that provision. The remaining workers were covered by 16 other workweek schedules ranging from 22½ to 50 hours. Overtime was practically always paid for at time and a half, with 83 percent of the members subject to this premium scale.

Scope and Method of the Study

This study is one of a series of annual surveys begun in 1907, covering union scales in various trades in selected cities of the United States. The number of cities included has been gradually increased from 39 to 75. These cities are in 40 States and the District of Columbia. Effective union agreements providing wage and hour scales for bakery workers were reported in 61 of the 75 cities in 1941.

Agents of the Bureau collected the data in personal interviews with some responsible official of each local union. Each scale was verified by the union official interviewed, and was further checked by comparison with the written agreements when copies were available. The current survey included 2,547 quotations of scales covering 56,054 union members. All the data were effective as of June 1, 1941.

Averages.—The averages and percentages of change given in this report are weighted according to the number of union members covered by each scale. The resulting aggregates (rates multiplied by membership) were added and their sum was divided by the total number of members used in the weighting. The average thus reflects not only the actual scales of wages and hours provided in union agreements, but also the number of members benefiting from these scales. A weighted average of this kind is obviously more realistic than a

¹ Prepared by Kermit B. Mohn, of the Bureau's Industrial Relations Division, under the direction of Florence Peterson, chief.

simple average of specific rates. In the latter case, a wage rate covering one or two members would be given the same importance as a rate covering one or two dozen members.

The percent of change from the previous year is the ratio between similar aggregates computed from the scales quoted for identical unions and occupational classifications in both years. The weights in both of the aggregates used in each year-to-year comparison were the membership figures reported in the second year.

Changes in coverage.—Prior to 1939 only union members engaged principally in bread baking were included. In the 1939 and 1940 surveys, all types of baking and all occupations, except truck drivers and other deliverymen, covered by union agreements were included. In the current report, plant-maintenance workers, as well as truck drivers and other deliverymen, were excluded from the tabulations.

In the 1941 survey, for the first time, the data are classified according to the various types of baking. Separate figures are shown for hand shops, machine shops, Hebrew baking, other specialized baking, pie and pastry shops, and cracker and cookie shops. Other specialized shops include those baking French, Polish, Italian, Bohemian, Scandinavian, and Spanish products.

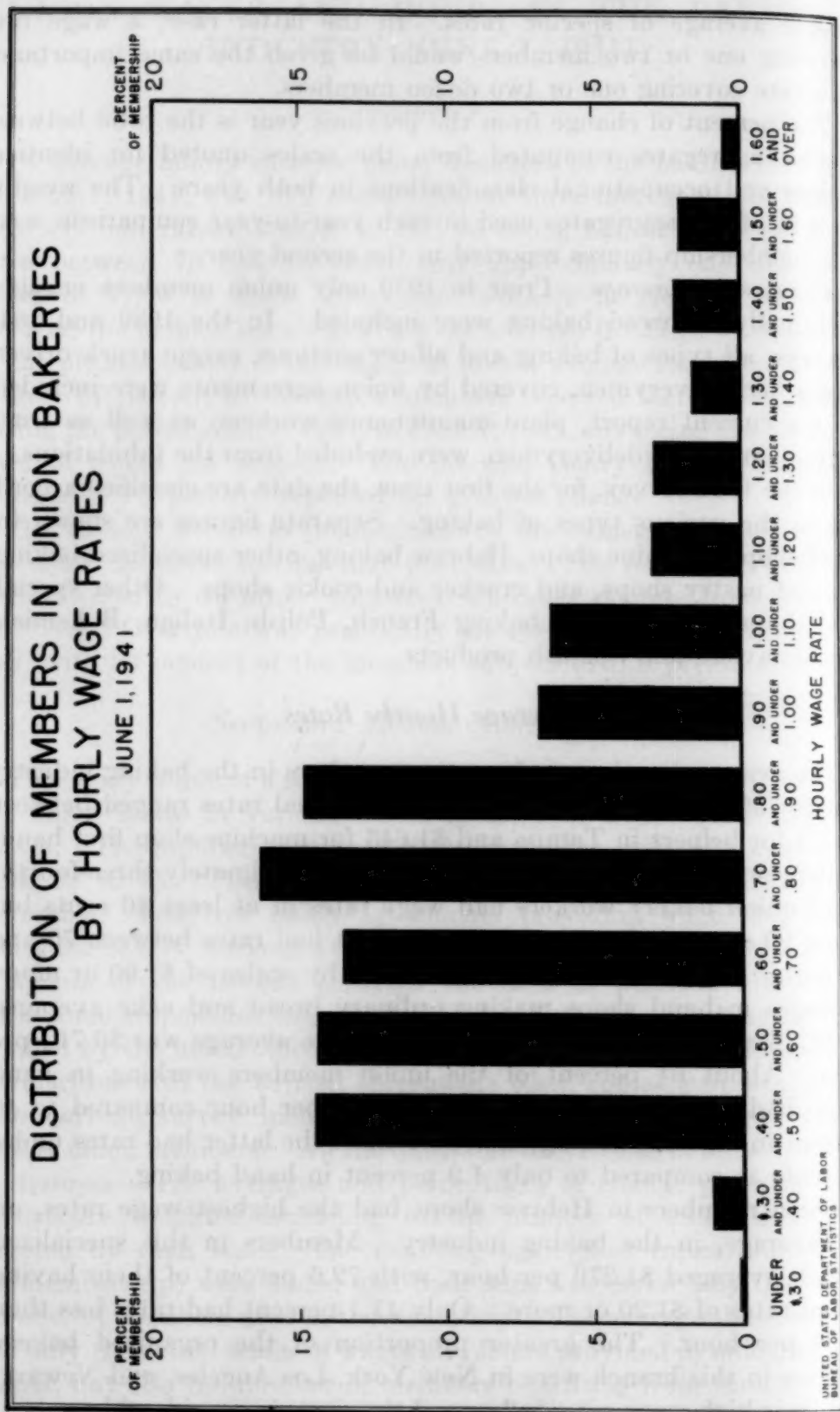
Average Hourly Rates

The average hourly rate for union members in the baking industry was \$0.769 on June 1, 1941 (table 1). Actual rates ranged between \$0.271 for helpers in Tampa and \$1.643 for machine-shop first hands in Hebrew bakeries in New York City. Approximately three-fourths of all union bakery workers had wage rates of at least 40 cents but under 90 cents per hour, and 31.1 percent had rates between 70 and 90 cents. Almost one-fifth were covered by scales of \$1.00 or more.

Wages in hand shops making ordinary bread and cake averaged \$0.847 per hour, while in machine shops the average was \$0.712 per hour. About 64 percent of the union members working in hand shops had rates between \$0.70 and \$1.00 per hour compared to 40 percent in machine baking; 48.6 percent of the latter had rates under 70 cents as compared to only 1.9 percent in hand baking.

Union members in Hebrew shops had the highest wage rates, on the average, in the baking industry. Members in this specialized branch averaged \$1.279 per hour, with 72.6 percent of them having actual rates of \$1.20 or more. Only 11.1 percent had rates less than \$1.00 per hour. The greater proportion of the organized bakery workers in this branch were in New York, Los Angeles, and Newark, and their high wage rates influenced the average considerably.

Union rates in other specialized bakeries, such as Italian, Polish, French, Scandinavian, Bohemian, and Spanish, averaged \$0.885 per



hour. Over 72 percent of the union members in this branch had hourly scales between \$0.70 and \$1.10. These specialized types were found, usually, in the largest cities only.

The cracker and cookie and pie and pastry branches of the industry included the lowest paid workers, on the average, having average hourly rates of \$0.584 and \$0.533, respectively. Three-fourths of the union members in the cracker and cookie shops had wage rates between 40 and 70 cents per hour. About the same proportion of union members in pie and pastry shops were listed between 40 and 60 cents. The large differences in wage rates between these branches and the rest of the industry are attributable, in the main, to the factors of sex and skill. Female help is used extensively in cracker, cookie, pie, and pastry shops. In addition, the need for skilled labor is not nearly so great, as the shops, especially those making crackers and cookies, are highly mechanized.

Because of the dissimilarities in occupational designations and duties, no distribution based on particular occupations was possible. However, mixers and ovenmen generally had the highest rates specified in each agreement, while the lower scales applied to members in the auxiliary and less-skilled occupations, such as pan greasers, checkers, wrappers, slicers, and general helpers.

TABLE 1.—*Distribution of Union Members in the Bakery Trades, by Hourly Wage Rates, June 1, 1941*

Type of baking	Average rate per hour	Percent of union members whose rates (in cents) per hour were—														
		Under 30	30 and under 40	40 and under 50	50 and under 60	60 and under 70	70 and under 80	80 and under 90	90 and under 100	100 and under 110	110 and under 120	120 and under 130	130 and under 140	140 and under 150	150 and under 160	160 and over
All baking.....	\$0.769	0.1	1.0	14.5	14.4	13.5	16.3	14.8	6.8	6.4	3.0	2.9	1.6	2.2	2.0	0.5
Ordinary bread and cake, hand.....	.847		.5	6.0	2.5	9.9	17.9	25.3	20.5	9.5	1.6		2.8	3.5		
Ordinary bread and cake, machine.....	.712	(1)	1.3	14.9	15.2	17.2	19.6	15.8	4.5	5.7	3.4	1.4	1.0			
Pie and pastry.....	.533	.5	1.3	40.6	33.9	11.0	7.8	3.4	1.1	.2		.2		(1)		
Cracker and cookie.....	.584		.9	30.6	32.5	12.0	10.0	11.0	2.4	.6						
Hebrew baking.....	1.279			.5	.5	1.1	5.0	.9	3.1	10.4	5.9	20.8	5.8	19.4	21.3	5.3
Other specialized baking ².....	.885	.6	.4	2.3	7.8	4.5	13.4	19.7	22.3	16.9	5.5	4.2	2.4			

¹ Less than a tenth of 1 percent.

² French, Polish, Bohemian, Scandinavian, Spanish, Italian, etc.

Changes in Hourly Wage Rates, 1940 to 1941

The majority of union members in the bakery trades received hourly wage increases during the year ending June 1, 1941 (table 2). About 62 percent of the quotations, including over 57 percent of the total union members, showed increases. These increases raised the general level of union wages in the baking industry by 3.3 percent

during the period June 1, 1940, to June 1, 1941, as compared with a 2.7-percent rise for the previous year.

Union members in the pie and pastry branch, the lowest paid in the industry, were most successful in obtaining increases. Over 91 percent of them benefited by advances in scales. Three-fourths of the members in specialized bakeries, other than Hebrew, received raises. One-third of the members in hand shops and two-thirds in machine shops were recipients of higher rates. Slightly less than one-half of the members in cracker and cookie bakeries had their scales advanced. Those in Hebrew bakeries, already having the highest rates, benefited the least, as only 15.8 percent received increases.

TABLE 2.—Number of Changes in Union Wage-Rate Quotations and Percent of Members Affected, June 1, 1941, Compared with June 1, 1940

Type of baking	Number of comparable quotations	Number of quotations showing—			Percent of union members affected by—		
		Increase	Decrease	No change	Increase	Decrease	No change
All baking.....	2, 095	1, 296	5	794	57. 2	(1)	42. 8
Ordinary bread and cake, hand.....	213	121	3	89	33. 3	0. 1	66. 6
Ordinary bread and cake, machine.....	1, 204	838	1	365	67. 2	(1)	32. 8
Pie and pastry.....	81	67	—	14	91. 6	—	8. 4
Cracker and cookie.....	355	170	—	185	47. 7	—	52. 3
Hebrew baking.....	119	41	1	77	15. 8	. 1	84. 1
Other specialized baking ²	123	59	—	64	75. 2	—	24. 8

¹ Less than a tenth of 1 percent.

² French, Polish, Bohemian, Scandinavian, Spanish, Italian, etc.

TABLE 3.—Number of Increases in Union Wage-Rate Quotations, and Percent of Members Affected, by Percent of Increase, June 1, 1941, Compared with June 1, 1940

Type of baking	Number of quotations showing increases of—						Percent of total members affected by increases of—					
	Less than 5 percent	5 and under 10 percent	10 and under 15 percent	15 and under 20 percent	20 and under 25 percent	25 percent and over	Less than 5 percent	5 and under 10 percent	10 and under 15 percent	15 and under 20 percent	20 and under 25 percent	25 percent and over
All baking.....	381	585	222	57	24	27	22. 0	25. 5	7. 5	1. 1	0. 5	0. 6
Ordinary bread and cake, hand.....	22	59	25	12	1	2	6. 2	19. 1	4. 6	2. 4	(1)	1. 0
Ordinary bread and cake, machine.....	289	336	133	41	17	22	31. 0	25. 0	8. 8	1. 1	. 6	. 7
Pie and pastry.....	8	31	21	1	4	2	9. 1	67. 8	9. 7	1. 8	2. 5	. 7
Cracker and cookie.....	31	112	23	3	—	1	9. 4	34. 2	3. 1	. 2	—	. 8
Hebrew baking.....	19	10	10	—	2	—	12. 3	1. 3	2. 0	—	. 2	—
Other specialized baking ²	12	37	10	—	—	—	7. 9	50. 0	17. 3	—	—	—

¹ Less than a tenth of 1 percent.

² French, Polish, Bohemian, Scandinavian, Spanish, Italian, etc.

Table 3 shows that the amount of the increases, in general, was less than 10 percent; only 9.7 percent of the total union membership received larger raises. Of the increases reported, the greater propor-

tion amounted to at least 5 percent over the 1940 rates in all branches except Hebrew baking. Exactly one-half of the members in specialized bakeries, other than Hebrew, received raises of between 5 and 10 percent. More than two-thirds of those in the pie and pastry branch, over one-third of the cracker and cookie workers, and one-fourth of those in machine shops making ordinary bread and cake had their 1940 rates increased between 5 and 10 percent.

Weekly Hours

The 40-hour week was most prevalent in union agreements in the baking industry. Exactly 69 percent of the organized workers were reported to be covered by a regular workweek of that length. The remaining 31 percent of the union members were scattered among 16 other straight-time weekly work periods; less than 10 percent of the total had a week of 48 hours and over (table 4). The great number of the agreements providing workweeks of less than 40 hours was occasioned, primarily, by share-the-work plans; these plans were most prevalent in Hebrew bakeries. The 36-hour week was fairly common in the machine bake shops of the Pacific coast.

TABLE 4.—*Distribution of Union Members in the Bakery Trades, by Hours per Week, June 1, 1941*

Classified weekly hours	All baking	Ordinary bread and cake, hand shops	Ordinary bread and cake, machine shops	Pie and pastry	Cracker and cookie	Hebrew baking	Other specialized baking ¹
Average hours per week.....	40.6	44.6	40.2	41.3	40.0	36.5	43.1
Percent of members whose hours per week were—							
22½ hours.....	.6					6.1	
24½ hours.....	.6					6.2	
26¼ hours.....	1.1					12.2	
28 hours.....	.9					10.0	
30 hours.....	.9					10.0	
32 hours.....	.2						4.9
35 hours.....	.6						13.2
36 hours.....	2.8		4.6				
37½ hours.....	.7					5.4	4.8
39 hours.....	.1						2.1
40 hours.....	69.0	25.0	87.0	63.3	100.0	9.4	17.2
42 hours.....	4.4	13.4	2.3	25.9		.3	4.7
44 hours.....	2.3	3.5	3.0	.2		.1	
45 hours.....	4.6	14.4	1.0			22.4	.9
47 hours.....	1.5		1.9	7.6		.7	
48 hours.....	9.7	43.7	.2	3.0		17.2	52.2
50 hours.....	(2)		(2)				

¹ French, Polish, Bohemian, Scandinavian, Spanish, Italian, etc.

² Less than a tenth of 1 percent.

The 40-hour week was universal in unionized cracker and cookie bakeries. Machine shops making ordinary bread and cake operated on the 40-hour basis in a majority of the cases; 87 percent of the union members employed therein observed those maximum hours at

straight time. In the hand shops 75 percent of the union members were covered by workweeks of more than 40 hours; almost 44 percent had a normal workweek of 48 hours. A majority of union members in specialized bakeries, other than Hebrew shops, also were covered by the 48-hour week. In contrast, a slight majority of the members working in Hebrew bakeries had workweeks of less than 40 hours, mainly as a result of share-the-work plans.

Weighting the various weekly working schedules by the union membership covered by each, resulted in an average maximum workweek in the baking industry of 40.6 hours. Only the average for Hebrew bakeries was lower (36.5) by an appreciable amount, while the average for hand shops making ordinary bread and cake was the highest (44.6).

The average workweek decreased by 0.2 percent during the period June 1, 1940, to June 1, 1941. Of the 2,092 comparable quotations, 250 indicated a reduced working schedule affecting 7 percent of the union members (table 5). Slightly more than 1 percent of the quotations, including 1.7 percent of the total union members, indicated a lengthened workweek.

TABLE 5.—*Number of Changes in Union Hour Quotations and Percent of Members Affected, June 1, 1941, Compared with June 1, 1940*

Type of baking	Number of comparable quotations	Number of quotations showing—			Percent of union members affected by—		
		Increase	Decrease	No change	Increase	Decrease	No change
All baking.....	2,092	26	250	1,816	1.7	7.0	91.3
Ordinary bread and cake, hand.....	213	—	19	194	—	1.5	98.5
Ordinary bread and cake, machine.....	1,201	18	206	977	2.2	9.8	88.0
Pie and pastry.....	81	8	20	53	8.4	13.6	78.0
Cracker and cookie.....	355	—	2	353	—	.4	99.6
Hebrew baking.....	119	—	—	119	—	—	100.0
Other specialized baking ¹	123	—	3	120	—	9.0	91.0

¹ French, Polish, Bohemian, Scandinavian, Spanish, Italian, etc.

Overtime

A great majority (87 percent) of quotations of union bakery scales indicated a penalty rate of time and one-half for overtime (table 6). Slightly more than 83 percent of the union members were covered by this provision. Other penalty rates included time and one-third (2.9 percent of the members), double time (2.6 percent), or a specific amount (2 percent), while for 7.8 percent of the members overtime was not compensable at a penalty rate and for 1.6 percent of the members overtime was prohibited.

Most of the members receiving straight time for overtime worked in Hebrew bakeries where share-the-work plans were in operation.

In these cases overtime on a penalty basis was not generally allowed until the hours stipulated in the agreement were worked, rather than those hours called "normal" under the share-the-work adjustment.

Generally any overtime work was discouraged and frequently a limit was set upon the amount of overtime permitted. Many of the agreements, however, in recognition of the fact that the demand for bakery products is not uniform throughout the week, specified that the overtime rate should apply only on the basis of weekly hours and not on the basis of any one shift. Others achieved the same result by specifying longer regular shifts on certain days than on others. Not infrequently a tolerance was provided whereby a limited amount of overtime could be worked without payment of any penalty rate. This tolerance generally was not over 2 hours in any week.

TABLE 6.—Overtime Rates Provided in Union Bakery Agreements, June 1, 1941

Type of baking	Number of quotations showing initial overtime rates of—						Percent of union members having initial overtime rates of—					
	Time and one-third	Time and one-half	Double time	Other penalty rates	No penalty rates	Overtime prohibited	Time and one-third	Time and one-half	Double time	Other penalty rates	No penalty rate	Overtime prohibited
All baking.....	67	2,210	12	33	176	48	2.9	83.1	2.6	2.0	7.8	1.6
Ordinary bread and cake, hand.....	3	223	2	6	19	4	1.3	77.6	7.7	1.7	.5	11.2
Ordinary bread and cake, machine.....	21	1,377	5	-----	106	-----	3.7	91.8	2.0	-----	2.5	-----
Pie and pastry.....	-----	104	2	-----	11	5	-----	96.1	.8	-----	2.1	1.0
Cracker and cookie.....	43	360	-----	-----	-----	-----	5.0	95.0	-----	-----	-----	-----
Hebrew baking.....	-----	62	-----	16	40	1	-----	19.0	-----	14.0	66.9	.1
Other specialized baking ¹	-----	84	3	11	-----	38	-----	78.6	8.2	11.5	-----	1.7

¹ French, Polish, Bohemian, Scandinavian, Spanish, Italian, etc.

Average Rates by City

Table 7 shows the average hourly rate for organized bakery workers in each city, grouped according to the type of baking. These averages were computed by weighting each rate by the number of union members covered by it and then dividing the total aggregates so obtained by the total number of union members in the city. In using this table one should bear in mind the fact that it is possible for average rates to vary inversely with the degree of organization. If the union has organized all of the occupations and workers in a city its average will, probably, be lower than that of a union that has organized only the more skilled groups. However, this condition is rapidly disappearing, as the unions are organizing more of the unskilled workers each year. In several cities it was impossible to separate the members in hand and machine shops for the purpose of

computing an average. In these cases, all were tabulated under the type of baking which included the greater number of members.

Portland, Oreg., had the highest average rates in both hand and machine shops making ordinary bread and cake—\$1.036 and \$1.109 per hour, respectively. Washington, D. C., with an average of \$1.065 was next in line in the machine branch. These three averages were the only ones amounting to as much as \$1 in these branches. New York recorded the second highest average (\$0.978) among the hand shops. Butte, Seattle, and San Francisco in the machine branch, and Cincinnati and San Francisco in the hand group, also had average rates of more than 90 cents. The cities on the Pacific coast tended to have higher hourly scales as well as shorter workweeks (36 hours).

In the Hebrew bakery classification, the highest average hourly rate prevailed in New York (\$1.374), followed by Los Angeles (\$1.312) and Newark (\$1.296). Among other specialized bakeries, Chicago headed the list with \$0.958; Buffalo was second with \$0.943.

New York had the highest average in cracker and cookie bakeries (\$0.638). San Francisco and Dayton followed with averages of \$0.633 and \$0.630. San Francisco topped all other cities in the pie and pastry field, with the high average of \$0.954; and Rock Island district was second, with \$0.895.

TABLE 7.—Average Hourly Rates for Union Bakery Workers in Each City, by Type of Baking, June 1, 1941

City and type of baking	Average hourly rate	City and type of baking	Average hourly rate
Ordinary bread and cake, hand shops:		Ordinary bread and cake, machine shops:	
Portland, Oreg.	\$1.036	Portland, Oreg.	\$1.109
New York, N. Y.	.978	Washington, D. C.	1.065
Cincinnati, Ohio	.929	Butte, Mont.	.985
San Francisco, Calif.	.921	Seattle, Wash.	.969
Rochester, N. Y.	.866	San Francisco, Calif.	.939
Cleveland, Ohio	.863	Spokane, Wash.	.899
Chicago, Ill.	.857	Denver, Colo.	.893
Average for all cities	.847	Duluth, Minn.	.867
Newark, N. J.	.811	Los Angeles, Calif.	.852
Springfield, Mass.	.799	Oklahoma City, Okla.	.814
New Haven, Conn.	.780	St. Louis, Mo.	.804
St. Louis, Mo.	.772	Minneapolis, Minn.	.780
Denver, Colo.	.761	Rochester, N. Y.	.780
Rock Island (Ill.) district ¹	.750	Rock Island (Ill.) district ¹	.780
Buffalo, N. Y.	.720	Madison, Wis.	.777
Worcester, Mass.	.712	New York, N. Y.	.735
Toledo, Ohio	.708	Newark, N. J.	.734
St. Paul, Minn.	.705	Worcester, Mass.	.733
Minneapolis, Minn.	.705	Kansas City, Mo.	.724
Manchester, N. H.	.696	Houston, Tex.	.723
Houston, Tex.	.675	Cincinnati, Ohio	.715
Youngstown, Ohio	.671	Average for all cities	.714
Peoria, Ill.	.665	Milwaukee, Wis.	.708
Des Moines, Iowa	.656	Salt Lake City, Utah	.690
Milwaukee, Wis.	.640	Peoria, Ill.	.689
New Orleans, La.	.635	Youngstown, Ohio	.683
Salt Lake City, Utah	.629	Detroit, Mich.	.676
Phoenix, Ariz.	.611	Pittsburgh, Pa.	.672
Dallas, Tex.	.609	Reading, Pa.	.672
South Bend, Ind.	.597	Cleveland, Ohio	.664
Boston, Mass.	.580	Providence, R. I.	.657
Scranton, Pa.	.574	St. Paul, Minn.	.657
Pittsburgh, Pa.	.516	Springfield, Mass.	.657
Indianapolis, Ind.	.492	Toledo, Ohio	.656
Tampa, Fla.	.472	Wichita, Kans.	.656
Birmingham, Ala.	.464		

See footnotes at end of table.

TABLE 7.—Average Hourly Rates for Union Bakery Workers in Each City, by Type of Baking, June 1, 1941—Continued

City and type of baking	Average hourly rate	City and type of baking	Average hourly rate
Ordinary bread and cake, machine shops—Continued.		Hebrew baking—Continued.	
Little Rock, Ark.	\$0.645	Chicago, Ill.	\$1.213
Dayton, Ohio.	.640	Detroit, Mich.	1.155
Des Moines, Iowa.	.638	Pittsburgh, Pa.	1.126
Louisville, Ky.	.636	Cleveland, Ohio.	1.114
Buffalo, N. Y.	.631	Rochester, N. Y.	1.085
Indianapolis, Ind.	.629	Worcester, Mass.	1.075
Chicago, Ill.	.623	Baltimore, Md.	1.066
Omaha, Nebr.	.618	Philadelphia, Pa.	1.045
Columbus, Ohio.	.617	New Haven, Conn.	1.020
Phoenix, Ariz.	.614	Providence, R. I.	.957
South Bend, Ind.	.613	Springfield, Mass.	.926
New Orleans, La.	.610	Denver, Colo.	.924
Philadelphia, Pa.	.606	St. Louis, Mo.	.912
Dallas, Tex.	.605	Milwaukee, Wis.	.894
Boston, Mass.	.598	Kansas City, Mo.	.851
Scranton, Pa.	.592	Youngstown, Ohio.	.749
Memphis, Tenn.	.563	Minneapolis, Minn.	.710
Baltimore, Md.	.541	Reading, Pa.	.575
Birmingham, Ala.	.531	Other specialized baking: ⁴	
Charlotte, N. C.	.527	Chicago, Ill.	.958
Atlanta, Ga.	.488	Buffalo, N. Y.	.943
Jacksonville, Fla.	.487	San Francisco, Calif.	.924
Richmond, Va.	.486	New York, N. Y.	.905
Tampa, Fla.	.449	Pittsburgh, Pa.	.904
Nashville, Tenn.	.398	Average for all cities.	.885
Pie and pastry:		Detroit, Mich.	.877
San Francisco, Calif.	.954	Cleveland, Ohio.	.823
Rock Island (Ill.) district ¹	.895	Philadelphia, Pa.	.750
Rochester, N. Y.	.688	Los Angeles, Calif.	.689
Boston, Mass.	.618	Tampa, Fla.	.383
Indianapolis, Ind.	.609	Cracker and cookie:	
New York, N. Y.	.592	New York, N. Y.	.638
Scranton, Pa.	.571	San Francisco, Calif.	.633
Worcester, Mass.	.571	Dayton, Ohio.	.630
Toledo, Ohio.	.565	Los Angeles, Calif.	.609
Detroit, Mich.	.541	Detroit, Mich.	.604
Average for all cities.	.533	Kansas City, Mo.	.600
Cleveland, Ohio.	.527	Buffalo, N. Y.	.589
Providence, R. I.	.513	Average for all cities.	.584
Chicago, Ill.	.496	Boston, Mass.	.574
Philadelphia, Pa.	.486	Philadelphia, Pa.	.572
Buffalo, N. Y.	.445	Spokane, Wash.	.555
Baltimore, Md.	.400	Memphis, Tenn.	.554
Hebrew baking:		Minneapolis, Minn.	.553
New York, N. Y.	1.374	Toledo, Ohio.	.523
Los Angeles, Calif.	1.312	Seattle, Wash.	.503
Newark, N. J.	1.296	Portland, Oreg.	.488
Average for all cities.	1.279	Cleveland, Ohio.	.477
Boston, Mass.	1.249	Scranton, Pa.	.378

¹ Includes Rock Island, Ill., Moline, Ill., and Davenport, Iowa.² Includes a few small machine shops—not separable.³ Includes hand shops—not separable.⁴ French, Polish, Bohemian, Scandinavian, Spanish, Italian, etc.⁵ Includes Hebrew bakeries—not separable.

EARNINGS AND HOURS IN MANUFACTURE OF CIGARETTES, CHEWING AND SMOKING TOBACCO, AND SNUFF, DECEMBER 1940¹

Summary

THE 38,136 factory employees reported as employed in establishments manufacturing cigarettes, chewing and smoking tobacco, and snuff, earned on the average 53.6 cents an hour and \$20.67 a week in December 1940, as indicated by a survey by the Bureau of Labor Statistics. The majority of these workers were employed in factories whose principal product was cigarettes; these workers numbered 25,425 and averaged 55.5 cents an hour. Workers in chewing-tobacco plants, numbering 1,574, averaged 49.0 cents an hour; the 5,224 employees in smoking-tobacco plants averaged 54.6 cents; and the 1,269 workers in snuff factories averaged 53.4 cents. The average hourly earnings for the 4,644 employees reported in leaf-processing plants affiliated with manufacturing establishments amounted to 43.9 cents.

Nearly 85 percent of the factory workers covered in the Bureau's survey earned 40 cents an hour or more; only in the leaf-processing operations was there any concentration about the legal minimum of 30 cents an hour.

Comparison of the results of the 1940 survey with those of the last previous survey of the industry by the Bureau (in 1935) indicates that wages of tobacco workers rose by about 25 percent during the 5-year period.

Average hourly earnings of the 2,001 office workers covered by the Bureau's survey in December 1940 amounted to 81.3 cents, and their weekly earnings averaged \$30.61.

Characteristics of the Industry

This article presents and analyzes the wages and hours of work of employees in the various divisions of the tobacco industry other than the manufacture of cigars.² The branches of the industry examined in the present survey are defined by the Census of Manufactures to include "establishments primarily engaged in the manufacture of cigarettes, smoking and chewing tobacco, and snuff and which on the same premises may sort, dry, cure or stem tobacco." For purposes of the Bureau's study, the definition of the industry adopted by the

¹ Prepared by Thomas P. Henson, under the direction of Sidney C. Sufrin, of the Bureau's Division of Wage and Hour Statistics. This is part of a larger survey of the hours and earnings of workers in the tobacco industries, conducted during the early part of 1941 by the Division of Wage and Hour Statistics of the Bureau of Labor Statistics.

² See Monthly Labor Review, December 1941: "Hours and Earnings in the Cigar Industry, 1940."

Census was expanded to include workers in specialized establishments engaged in the sorting, drying, curing, and stemming of tobacco, if these workers were employed by companies or affiliates of companies engaged in the manufacture of cigarettes, smoking and chewing tobacco, or snuff.³

The reports of the Census of Manufactures indicate that in 1939 there were 87,527 wage earners in all tobacco-manufacturing industries, including the cigar industry. Of these wage earners, 50,897 (58.2 percent) were employed in cigar factories, 27,426 (31.3 percent) were engaged in cigarette factories, and 9,204 (10.5 percent) were employed in plants whose primary product was chewing or smoking tobacco or snuff. Although employment in the cigar industry is greater than that in all other tobacco manufactures combined, the value added by manufacture in these latter groups is markedly greater than the value added in the cigar industry. In 1939 the value added by manufacture in the cigar industry amounted to only about one-third of the \$227,000,000 reported for the cigarette branch. Plants manufacturing chewing and smoking tobacco and snuff reported a value added by manufacture about half as great as that of the cigar industry (\$42,000,000 as against \$82,000,000). These relationships undoubtedly reflect the high degree of mechanization in the noncigar branches as compared to the cigar industry.

Manufacture of cigarettes.—According to the Census of Manufactures, the cigarette branch of the tobacco industry⁴ in 1939 included 35 establishments, which employed 27,426 workers. The annual wage bill of these plants in that year was approximately \$26,000,000; thus the average annual wage per wage earner, including both full- and part-time workers, amounted to about \$970. The total value of the product of these cigarette plants in 1939 slightly exceeded a billion dollars,⁵ while the value added by manufacture slightly exceeded a quarter of that amount.

³ Separate tabulations are presented in this report for leaf plants which, although operated by companies engaged in further manufacture, are physically separated from the manufacturing establishments. It should be pointed out that a great deal of leaf processing is done on the same premises which carry on the manufacture of tobacco products. In the present report and in the Census reports, leaf-processing workers employed in plants primarily engaged in manufacturing are included in the tabulations of employees producing the dominant product. On the other hand, independent leaf dealers, many of whom engage extensively in exporting and who pay relatively lower wages than the other branches of the tobacco industry, are excluded from this report. (See Monthly Labor Review, July 1941: Hours and Earnings of Employees of Independent Leaf Tobacco Dealers.)

There is some further overlapping of branches, since two or more products are frequently manufactured in the same plant. For the purpose of the present discussion, all employees in such plants are classified in the branch of the major product. For example, in a plant whose major product is cigarettes, all the workers have been reported as employed in that branch, although in fact some of these employees may have been engaged in the manufacture of smoking and chewing tobacco.

⁴ As used hereafter in this article, the term "tobacco industry" includes only the cigarette, smoking and chewing tobacco, and snuff branches, and the leaf processing incidental to the manufacture of these products. The cigar industry is specifically excluded.

⁵ The value of cigarettes produced in these plants was over \$940,000,000. Other tobacco products manufactured in cigarette plants (cigars and smoking and chewing tobacco) amounted to approximately \$97,000,000.

Although the number of establishments in the cigarette industry fell from 40 to 35 between 1931 and 1939, the number of wage earners increased by no less than 36 percent, and the annual wage bill of the industry increased by as much as 78 percent. The average wage per worker consequently rose by a substantial amount.

Until about 1915, New York was the leading State in cigarette manufacture, but during the past 2 decades North Carolina has produced nearly half of the cigarettes of the United States. The importance of Virginia has also risen, while production in New York has dwindled to relative insignificance.⁶ This shift has undoubtedly been due in part to the economic advantages of proximity to the tobacco markets. The cigarette branch of the industry is found principally in medium-sized cities in which tobacco manufacture is the leading industry. Nearly 60 percent of the employees are in cities of less than 100,000 population, and more than four-fifths (80.2 percent) are in cities of less than 250,000 population. Only 3.2 percent of the cigarette workers are employed in cities with as many as 500,000 inhabitants.

On the whole, the cigarette industry is one of large-scale production and marked mechanization. The small plants predominate in numbers, but their production and employment are relatively insignificant.

Three companies produced roughly three-fourths of the United States' output of cigarettes in 1939. These firms typically use large-scale production techniques; over 95 percent of the employees engaged in manufacturing cigarettes in 1939 were employed in plants of 500 workers or more, and over four-fifths were in plants of 1,000 or more employees. The large-scale production methods of this branch are further emphasized by the fact that in 1939 half of all the producing establishments, as reported by the Census,⁷ employed 500 workers or more, and most of these employed over 1,000 workers apiece. Virtually all of the large plants and 80 percent of the workers in this branch were in North Carolina and Virginia. Nineteen of the plants (a majority) were outside these 2 States, but 14 of these reported employment of fewer than 50 workers and only 2 plants employed over 1,000 workers. New Jersey and Kentucky, with slightly more than 5,300 employees, were the only States aside from North Carolina and Virginia which reported an appreciable number of workers employed in cigarette establishments.

Manufacture of chewing and smoking tobacco and snuff.—In 1939 there were 132 establishments reported to the Census of Manufactures as engaged primarily in the manufacture of chewing and smoking tobacco and snuff. These establishments reported an average of

⁶ New York in 1939 produced less than one-half of 1 percent of the cigarette output of the United States, while North Carolina produced nearly 48 percent and Virginia, 34 percent.

⁷ The census reports are limited to establishments having a value of product of \$5,000 or more during the census year.

9,203 workers during the year and paid these workers a total of \$8,200,000. The annual earnings of full- and part-time workers averaged less than \$900 per person. The value of the product manufactured in 1939 was \$124,000,000. Employment in these branches has declined in the last decade by nearly a fifth; between 1937 and 1939 alone employment fell by more than 9 percent.

The manufacture of chewing and smoking tobacco and snuff, on the whole, is not so highly concentrated in large plants as is the manufacture of cigarettes. In 1939 over 35 percent of the workers were in plants employing fewer than 250 workers, and nearly 60 percent were in plants with less than 500 workers each. Of the 132 plants reporting to the Census of Manufactures in 1939, 102 employed fewer than 50 workers each, while only 10 plants employed more than 250 workers.

These branches are, in general, situated in cities of about the same size as those in which the cigarette plants are located. A somewhat greater proportion of the workers, however, are found in cities with a population of 500,000 or more.

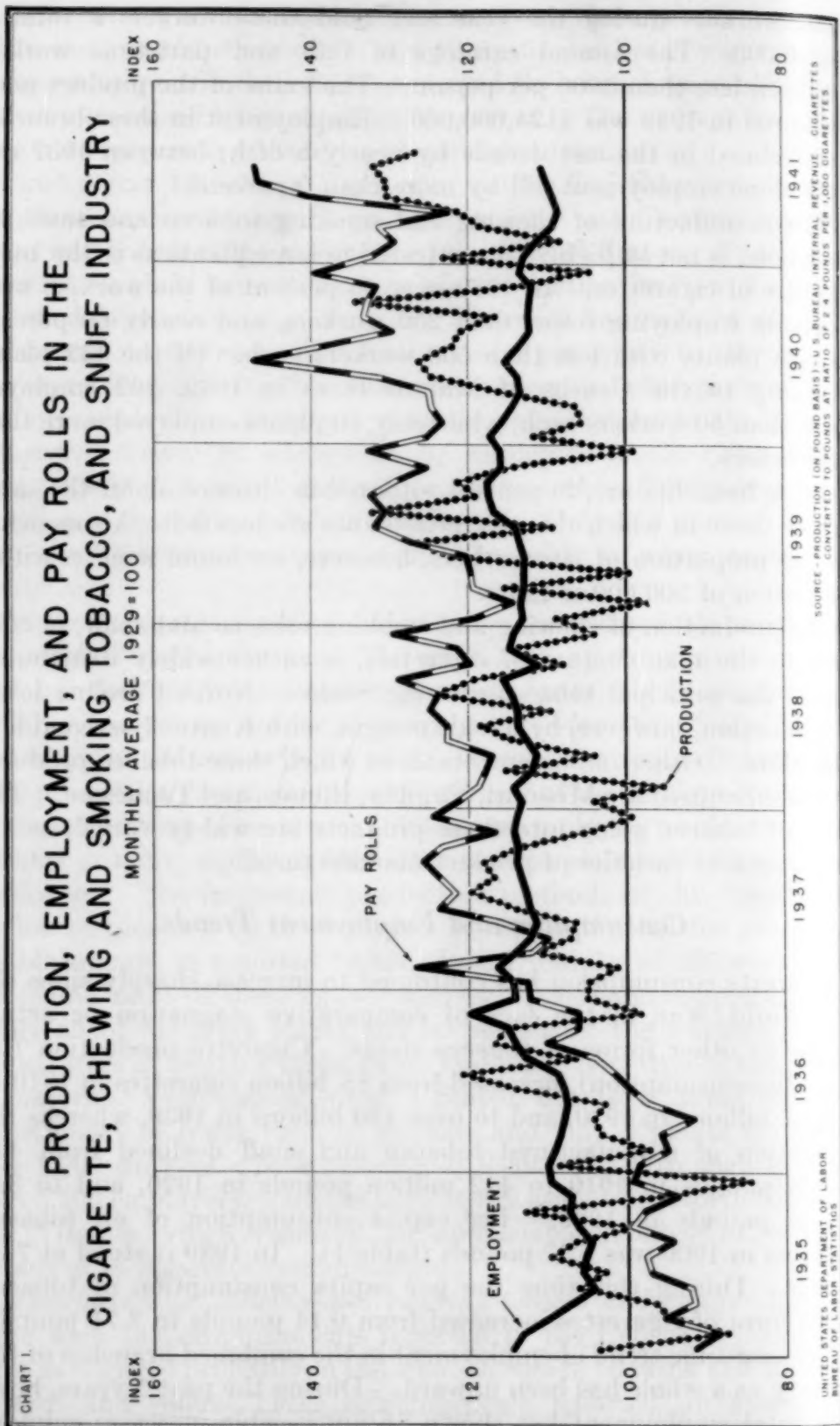
The production of chewing and smoking tobacco and snuff, in contrast to the manufacture of cigarettes, is rather widely distributed among the principal tobacco-growing States. North Carolina leads in production, however, by a wide margin, with Kentucky second and Ohio third. Other important States in which these tobacco products are manufactured are Missouri, Virginia, Illinois, and Tennessee. The types of tobacco going into these products are widely varied, as are the kinds and varieties of product manufactured.

Consumption and Employment Trends

Cigarette consumption has continued to increase sharply since the first World War, in the face of comparative stagnation or actual decline in other forms of tobacco usage. Cigarette production (for domestic consumption) increased from 8½ billion cigarettes in 1910 to over 47 billions in 1920, and to over 180 billions in 1939, whereas the production of manufactured tobacco and snuff declined from 447 million pounds in 1910 to 412 million pounds in 1920, and to 343 million pounds in 1939.* Per capita consumption of all tobacco products in 1900 was 5.37 pounds (table 1). In 1939 it stood at 7.30 pounds. During this time the per capita consumption of tobacco in the form of cigarettes increased from 0.14 pounds to 3.71 pounds.

The long-time trend of employment in the combined branches of the industry as a whole has been upward. During the past 5 years, however, total employment has shown no appreciable increase; employ-

* Reports of the U. S. Commissioner of Internal Revenue.



ment in cigarette manufacturing has been expanding, while that in the other branches has declined (chart 1).

TABLE 1.—*Per Capita Consumption of Tobacco Products in the United States, 1900-39*¹

Year	Total per capita consumption of tobacco (pounds)	Pounds per capita consumed in the form of—			
		Cigarettes	Cigars	Smoking and chewing tobacco	Snuff
1900.....	5.37	0.14	1.33	3.70	0.20
1905.....	6.00	.15	1.59	4.01	.25
1910.....	6.74	.34	1.59	4.47	.34
1915.....	6.71	.67	1.58	4.13	.33
1920.....	7.18	1.56	1.87	3.41	.34
1925.....	7.03	2.07	1.39	3.24	.33
1930.....	6.90	2.73	1.17	2.67	.33
1935.....	6.63	3.01	.96	2.38	.28
1939.....	7.30	3.71	.99	2.31	.29

¹ Data are from U. S. Department of Agriculture, Agricultural Marketing Service, Annual Reports on Tobacco Statistics.

Both production and pay rolls show definite seasonal fluctuations, in addition to a gradually rising long-time trend. Employment, however, shows no pronounced seasonal variations. The constancy of employment in the industry, in spite of the seasonal variations of pay rolls and production, is probably due to spreading the available employment during periods of restricted production. Over the 5-year period pay rolls increased considerably more than did production, as a result of the general upward movement of wages.

The Labor Force

Data obtained in connection with this survey indicate that men and women are employed in almost equal numbers in the combined branches of the industry. In the cigarette branch 50 percent of the workers were men and 50 percent women.⁹ In smoking-tobacco plants 52 percent and in chewing-tobacco plants 53 percent were men. In snuff manufacture men were substantially in the majority, with 62 percent of the workers, but in leaf processing 64 percent of the working force were women.

The predominance of women in leaf processing is explained by the fact that the principal occupations employing females, those of pickers and searchers and hand and machine stemmers, are of great importance to this branch. Of the 19,506 women in the industry, more than 45 percent (8,600) are in these occupations. Women also predominate in the occupations of cigarette catcher and inspector.

In few other important industries is there a greater percentage of Negro workers than in tobacco manufacturing. Workers of that race constituted 16,524 (nearly 44 percent) of the more than 38,000

⁹ These same general proportions obtain after a break-down by race. Of the 38,136 employees included in the survey, 10,763 were white males, 10,849 white females, 7,867 Negro males, and 8,657 Negro females.

workers included in the survey, and no less than four-fifths of the working force in leaf processing. In no other branch were Negro workers in the majority. They composed 42 percent of the workers in cigarette plants, 40 percent in chewing-tobacco manufacture, 27 percent in the smoking-tobacco branch, and but slightly more than 13 percent in the manufacture of snuff. Most of the Negro workers were employed in unskilled occupations; they formed a majority of the pickers and searchers, machine stemmers, hand stemmers, janitors, and floor workers.

Within the last 10 years there has been extensive trade-union organizing activity in the tobacco industries. Indications are that, at present, there are effective union agreements in a substantial majority of the plants manufacturing cigarettes and chewing and smoking tobacco. The snuff industry is still largely unorganized.

Organization among tobacco workers is chiefly confined to the Tobacco Workers International Union, an affiliate of the American Federation of Labor. The union was organized in the later years of the nineteenth century. In 1900 the membership was recorded at 6,000 workers, but available records indicate a declining trend in membership during the next 2 decades. In 1920, however, there was a sudden growth, resulting from organizing activity in one of the larger units in the industry, which brought the membership to around 15,000. By 1922, nevertheless, no more than 3,500 members remained in the Tobacco Workers International Union, and as late as 1933 the International claimed but 3,400 members. The next year marked the beginning of widespread organization which promptly brought the membership above the 10,000 mark. In 1940 the union claimed more than 19,000 members, exceeding all previous records.

The United Cannery, Agricultural, Packing and Allied Workers Union (C. I. O.) claims some 2,000 workers in the industry. The organization of tobacco workers by this union is a recent development.

Wage Trends in the Industry

The trend of wages in the tobacco industry for the past several years has been consistently upward, and is characterized by the almost complete absence of violent fluctuations. The greatest change recorded for any single recent month occurred in March 1935, shortly after the NRA codes for the industry became effective (table 2).¹⁰

¹⁰ The data presented in table 2 are based on reports of aggregate earnings and hours of work, submitted to the Bureau monthly by a large proportion of the firms in the industry. The scope of these monthly reports is somewhat less extensive than the Bureau's detailed study of December 1940, and the monthly figures, unlike those resulting from the detailed study, reflect the influence of overtime earnings at penalty rates. As a result of these differences the general average earnings secured by the two methods for December 1940 differed by fully 3.9 cents for the cigarette branch; the difference in the chewing and smoking tobacco and snuff branches was only 0.1 cent.

TABLE 2.—Average Hourly Earnings in Manufacture of Cigarettes and of Chewing and Smoking Tobacco and Snuff, by Month, 1935-41

Year	Average for year	January	February	March	April	May	June	July	August	September	October	November	December
Cigarettes													
1935.....	43.9	39.3	40.3	44.0	44.0	43.5	43.9	44.1	44.5	44.0	44.2	45.4	46.6
1936.....	49.2	48.7	49.2	48.9	49.3	48.8	49.0	49.2	48.4	48.5	49.4	50.1	50.8
1937.....	54.5	52.1	53.9	52.5	53.6	55.3	55.2	54.9	55.7	54.7	55.0	55.3	55.2
1938.....	55.6	56.7	56.5	56.7	56.2	55.7	55.2	54.5	55.1	55.1	55.4	55.0	56.0
1939.....	56.1	55.7	55.7	55.4	55.4	55.9	56.2	56.3	55.7	56.0	56.2	56.6	58.1
1940.....	59.0	58.3	57.9	58.1	58.9	58.7	60.4	59.5	59.3	59.1	59.0	59.2	59.4
1941.....	-----	60.0	60.6	60.8	62.4	63.3	63.9	63.9	63.7	63.9	-----	-----	-----
Chewing and smoking tobacco and snuff													
1935.....	43.2	41.5	42.9	43.9	43.4	43.3	43.7	44.4	44.1	43.6	43.3	42.6	42.3
1936.....	44.4	43.2	42.9	43.2	44.1	45.3	44.4	44.5	44.5	44.9	44.4	45.3	46.0
1937.....	49.1	45.5	46.0	46.2	48.5	49.2	50.1	50.4	50.7	51.0	51.3	50.4	50.5
1938.....	50.5	50.5	49.3	50.5	50.3	50.4	50.9	51.1	50.7	50.7	49.3	51.3	50.9
1939.....	51.4	50.6	50.4	51.0	50.2	51.1	51.2	52.4	51.7	51.5	52.1	52.4	52.5
1940.....	53.5	51.9	52.2	52.3	53.1	53.2	53.5	54.3	54.7	54.4	54.3	54.9	53.5
1941.....	-----	53.7	53.9	54.3	54.9	56.4	57.4	58.0	57.8	57.4	-----	-----	-----

Wage levels were generally maintained after the invalidation of the National Industrial Recovery Act; in the cigarette branch, hourly earnings have never since fallen to the level of May 1935. The inauguration of the 25-cent minimum wage under the Fair Labor Standards Act in October 1938 and the advance of the minimum to 30 cents a year later appear to have had little effect on the industry. Hourly earnings in December 1940, the month of the Bureau's questionnaire survey, were at about the level of the average for the year, but were more than 25 percent higher than they had been 5 years earlier.

By late 1941, additional wage increases had raised wages in the industry to new high levels, well above those prevailing during the period covered by the Bureau's survey. In the cigarette branch in September 1941 average hourly earnings were nearly 8 percent above their level of December 1940. In the chewing- and smoking-tobacco and snuff industry hourly earnings reached a peak in July 1941, when they too were 8 percent above the level for December 1940.

Scope and Method of Study

The basic data for the present survey were obtained by means of mail questionnaires. The questionnaires included inquiries concerning sex, color, occupation, "hours paid for," and earnings, for each employee, during the representative pay-roll period nearest to December 15, 1940. "Hours paid for" represent the number of hours an employee would have to work to earn the pay he received during the pay-roll period scheduled, were all his hours of work remunerated at his normal hourly rate of pay. Thus, an hour of overtime work at

penalty rates may be treated as more than an hour of time paid for, depending on the rate of pay for overtime work.¹¹ The substitution of "hours paid for" for hours actually worked permits the computation of normal average hourly earnings without their distortion by overtime penalty rates. This substitution tends to overstate the weekly hours of work, where overtime is common. Overtime work during the period covered by this study, however, appears to have been extremely limited.

This survey is the first comprehensive questionnaire wage study by the Bureau in which the workers were segregated by occupation. The occupational classifications followed in the survey are based on the findings of an earlier study of the industry.¹² It was not considered practicable, however, to classify the various occupations into skill groups.

A majority of the plants included in the survey reported data for a payroll period in December 1940, although a number reported for a period in January 1941 and fewer than 10 reported for earlier or later periods. Hourly earnings in this industry show little seasonal fluctuation, and it is believed that the period studied was fairly representative of normal operations.

The names of the firms to which the questionnaires were sent were obtained from the U. S. Bureau of Internal Revenue. Questionnaires were sent to 502 concerns, representing all branches of the industry. Many of those companies however, employed no wage earners or proved to be outside the scope of the survey. Usable returns were received from 113 establishments, or 22.5 percent of the number to which questionnaires were mailed. The plants submitting usable schedules employed 40,137 wage earners and office employees, or 1,148 more than the number in the industry, as reported by the 1939 Census of Manufactures. The present survey, however, includes central administrative office employees and certain employees of leaf-processing plants which are not covered by the Census of Manufactures figures. It is clear, therefore, that the data secured in the questionnaire survey cover the overwhelming majority of workers in the industry.¹³

Employees engaged in producing tin, paper, or wooden containers for manufactured products have been excluded from this study, as have also employees in insecticide departments.

¹¹ For example, an employee who actually worked 42 hours at regular rates and 2 hours at extra rates of time and one-half would be credited not with 44 hours, but with 45 hours paid for ($42 \text{ hours} + (2 \text{ hours} \times 1\frac{1}{2}) = 45 \text{ hours}$, the equivalent number of hours paid for at regular rates).

¹² See Monthly Labor Review, May 1936, p. 1322: Earnings in Cigarette, Snuff, and Chewing- and Smoking-Tobacco Plants, 1933-35.

¹³ Of 164 additional plants whose returns, for one reason or another, were not usable, 114 reported no employees, 15 were out of business, 23 were not within the scope of the survey, and 12 were excluded for various other reasons. This industry includes many firms engaged in custom blending of smoking tobacco which carry on business in connection with retail stores. Such firms, although they rarely employ workers engaged exclusively in tobacco manufacturing, must be registered with the Bureau of Internal Revenue.

Table 3 presents for each branch of the industry the number of reporting plants and the number of wage earners (exclusive of office employees) covered by the Bureau's survey.

TABLE 3.—*Number of Plants and Employees Included in Survey of Cigarette, Chewing and Smoking Tobacco, and Snuff Industry, by Branch of Industry and by Sex*

Branch	Plants		Workers					
	Number	Percent	Total		Male		Female	
			Number	Percent	Number	Percent	Number	Percent
All branches.....	¹ 106	100.0	38,136	100.0	18,630	100.0	19,506	100.0
Cigarettes.....	23	21.7	25,425	66.7	12,608	67.7	12,817	65.7
Snuff.....	9	8.5	1,269	3.3	782	4.2	487	2.5
Smoking tobacco.....	31	29.3	5,224	13.7	2,744	14.7	2,480	12.7
Chewing tobacco.....	24	22.6	1,574	4.1	832	4.5	742	3.8
Leaf processing.....	19	17.9	4,644	12.2	1,664	8.9	2,980	15.3

¹ This table excludes 7 central administrative offices.

Average Hourly Earnings

METHOD OF WAGE PAYMENT

The great majority of workers in this industry were paid on a time-rate basis. Data obtained in connection with this survey indicate that less than 14 percent of the employees covered were paid by the piece. The greatest proportion of pieceworkers was found in chewing-tobacco plants, where over a third (37.2 percent) of the employees were paid on a piece basis. This exception is understandable since much of the leaf for making chewing tobacco is stemmed by hand, and hand stemmers are typically paid piece rates. Lump capping, also an important operation in chewing-tobacco manufacture, is usually paid for at piece rates.

Approximately a fifth of the employees in smoking-tobacco and snuff plants were paid on a piece basis, as compared with only 13 percent in leaf-processing plants and slightly less than 10 percent in the highly-mechanized cigarette branch.

HOURLY EARNINGS BY PRODUCT AND REGION

Hourly earnings of the 38,136 wage earners¹⁴ included in the Bureau's survey averaged 53.6 cents in December 1940.

Employees of cigarette plants commonly earned the highest wages in the industry (table 4). The general average hourly wage of 55.5 cents for cigarette plants exceeded the average for chewing-tobacco plants (49.0 cents) by 13.3 percent. The latter is the lowest average recorded for any fabricating branch, and the average for leaf-proces-

¹⁴ A later section of this report deals specifically with the hours and earnings of 2,001 office workers included in the Bureau's survey. These workers are excluded from the discussion and tabulations appearing elsewhere.

sing plants (43.9 cents) is the lowest of any branch. Workers in smoking-tobacco plants averaged 54.6 cents, and snuff workers 53.4 cents an hour.

TABLE 4.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings of Employees in Specified Branches of the Tobacco Industry, by Region, December 1940

Branch and region	Number of plants	Number of employees	Average hourly earnings	Average weekly hours ¹	Average weekly earnings
All branches.....	106	38,136	\$0.536	38.5	\$20.67
North Carolina.....	10	16,048	.542	38.5	20.87
Virginia.....	14	9,904	.535	39.2	20.98
Kentucky.....	16	4,896	.508	38.8	19.71
Tennessee.....	12	1,072	.415	38.4	15.93
Other States ²	54	6,216	.567	37.4	21.20
Cigarettes.....	23	25,425	.555	39.0	21.62
North Carolina.....	4	12,891	.561	38.5	21.62
Virginia and Kentucky.....	8	10,837	.545	39.4	21.44
Other States ³	11	1,697	.577	39.6	22.81
Chewing tobacco.....	24	1,574	.490	35.7	17.49
North Carolina and Virginia.....	3	341	.355	32.5	11.54
Kentucky and Tennessee.....	9	550	.396	34.4	13.62
Other States ⁴	12	683	.614	38.4	23.57
Smoking tobacco.....	31	5,224	.546	36.8	20.09
North Carolina and Virginia.....	4	1,799	.531	38.1	20.20
Kentucky and Tennessee.....	4	1,080	.522	37.8	19.74
Other States ⁵	23	2,345	.571	35.3	20.17
Snuff: All regions ⁶	9	1,269	.534	39.9	21.28
Leaf-processing plants.....	19	4,644	.439	38.7	16.99
North Carolina and Virginia.....	7	3,419	.450	39.5	17.75
Kentucky and Tennessee.....	9	418	.321	37.6	12.06
Other States ⁷	3	807	.453	36.0	16.31

¹ Refers to "hours paid for," discussed earlier in this report.

² Includes California, Delaware, Illinois, Indiana, Iowa, Massachusetts, Michigan, Missouri, New Jersey, New York, Ohio, Pennsylvania, West Virginia, and Wisconsin.

³ Includes California, New Jersey, New York, Ohio, and Pennsylvania.

⁴ Includes Iowa, Michigan, New York, Ohio, Pennsylvania, and West Virginia.

⁵ Includes California, Illinois, Indiana, Massachusetts, Missouri, New York, Ohio, Pennsylvania, and Wisconsin.

⁶ Includes Delaware, Illinois, New Jersey, and Tennessee. Regional data omitted to avoid disclosure of individual operations.

⁷ Includes Missouri, Pennsylvania, and West Virginia.

For the most part, the average earnings of cigarette workers also tended to be higher in the various separate regions than did those of the employees of other branches. The highest regional average hourly wage, however, was paid to employees of the chewing-tobacco branch in the northern ("other States") region (table 4). This is presumably because of the concentration of chewing-tobacco workers who are outside the major tobacco States in large metropolitan centers where relatively high wage levels prevail.

North Carolina, where over 40 percent of the workers of the entire industry are employed, paid the highest wages of any of the important tobacco States. The average was 54.2 cents per hour. The lowest regional average (41.5 cents an hour) was reported in Tennessee, where no cigarette workers were employed. Workers in Virginia averaged 53.5 cents an hour.

Regional differences in average hourly earnings within the branches of the industry varied from a range of over 25 cents in the chewing-tobacco branch to one of only 3.2 cents in the cigarette branch.

VARIATIONS BY SIZE OF EMPLOYING COMPANY

Because this industry is one with high concentration of ownership, the relation between size of the employing corporation and average earnings of the workers is of special interest. The size of the corporation or "company" was measured by aggregating the employment figures for all the plants of each corporation, including those of any known subsidiaries. Data by size of company, presented in table 5, indicate that the four largest companies in the industry employed more than 70 percent of the workers, and paid wages which averaged 4.2 cents an hour higher than the average hourly earnings of employees in the next six companies. The average for the smallest companies, which employed only slightly more than 8 percent of the workers of the industry, was 6.3 cents an hour less than was the average for the largest four (48.7 cents as against 55.0 cents an hour).

TABLE 5.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings in the Cigarette, Chewing and Smoking Tobacco, and Snuff Industry, by Size of Company, December 1940

Size of company	Number of employees	Average hourly earnings	Average weekly hours ¹	Average weekly earnings
Total.....	38,136	\$0.536	38.5	\$20.67
Largest 4 companies.....	27,427	.550	38.4	21.12
Next 6 companies.....	7,617	.508	38.8	19.68
All other companies.....	3,092	.487	39.0	19.01

¹ Refers to "hours paid for," discussed earlier in this report.

The nature of the data available makes it impracticable, if not impossible, to show wage averages for these groups of companies by products manufactured; however, enough evidence is available to support the belief that were such an analysis shown, the above wage differences would be substantially maintained in each branch of the industry.

DISTRIBUTION OF WORKERS BY AVERAGE HOURLY EARNINGS

More than four-fifths (83.8 percent) of the workers in the industry earned 40.0 cents an hour or more (table 6).¹⁶ The workers earning less than 40.0 cents were heavily concentrated in the wage brackets above 35.0 cents. The proportion of workers earning 30.0 cents an

¹⁶ Establishments employing 5,652 workers failed to report wage data in a form which permitted their inclusion in the tabulations showing the distribution of workers by average hourly earnings. Exclusion of these workers raised the over-all average for the entire industry by less than 1 cent and resulted in overstating very slightly the proportion of workers in the higher wage classes.

hour or less constituted a negligible fraction of the total employees, only 25 workers being reported as receiving less than the 30-cent legal minimum. More than 30 percent of the workers earned 40 cents and under 50 cents, the heaviest concentration in the entire distribution (12.5 percent) being in the interval 40.0 and under 42.5 cents. Another significant concentration (10.2 percent) occurred in the interval 62.5 and under 67.5 cents.

TABLE 6.—Percentage Distribution of Workers in Specified Branches of the Tobacco Industry, by Average Hourly Earnings, December 1940¹

Average hourly earnings	All workers	Cigarettes	Chewing tobacco	Smoking tobacco	Snuff	Leaf processing
Under 30.0 cents.....	0.1	(2)	0.8	0.2		
30.0 and under 32.5 cents.....	3.3	1.0	20.9	1.6	2.8	9.5
32.5 and under 35.0 cents.....	2.2	1.4	8.4	.5	1.6	5.4
35.0 and under 37.5 cents.....	5.4	6.4	5.8	2.7	6.4	3.3
37.5 and under 40.0 cents.....	5.2	6.9	4.3	.9	5.4	2.3
40.0 and under 42.5 cents.....	12.5	8.2	4.7	10.2	15.1	35.4
42.5 and under 45.0 cents.....	7.3	7.5	6.5	2.9	8.0	11.0
45.0 and under 47.5 cents.....	7.1	5.7	11.0	10.9	4.9	9.0
47.5 and under 50.0 cents.....	4.5	3.6	1.8	5.2	8.8	7.8
50.0 and under 52.5 cents.....	6.5	5.6	4.4	12.9	6.2	5.0
52.5 and under 57.5 cents.....	8.8	9.0	6.2	11.2	10.8	6.2
57.5 and under 62.5 cents.....	7.3	7.8	7.3	11.4	5.6	1.5
62.5 and under 67.5 cents.....	10.2	12.2	5.7	13.1	4.6	1.1
67.5 and under 72.5 cents.....	5.6	7.1	3.6	4.3	8.3	.5
72.5 and under 77.5 cents.....	5.1	6.9	2.7	2.8	3.2	.5
77.5 and under 82.5 cents.....	4.1	5.6	1.3	2.9	1.3	.3
82.5 and under 87.5 cents.....	1.2	1.3	.7	1.9	2.0	.1
87.5 and under 92.5 cents.....	.7	.6	1.0	1.6	1.2	.2
92.5 and under 100.0 cents.....	.8	.7	1.0	1.3	1.2	.3
100.0 and under 110.0 cents.....	1.3	1.6	.8	.9	1.3	.4
110.0 and under 120.0 cents.....	.6	.7	.4	.4	.7	.2
120.0 cents and over.....	.2	.2	.7	.2	.6	(2)
Total.....	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers.....	32,484	20,477	1,574	4,520	1,269	4,644

¹ This table excludes 5,652 workers who were not reported in such a manner as to permit inclusion in frequency distributions.

² Less than a tenth of 1 percent.

Cigarettes.—Less than one-tenth (8.8 percent) of the workers in this branch earned wages below 37.5 cents an hour and only about 15 percent of the workers averaged less than 40.0 cents an hour. Over one-third received 52.5 cents an hour but less than 72.5 cents.

Chewing tobacco.—Wages in this branch tended to concentrate at lower levels than in any other branch except leaf processing. More than one-fifth (20.9 percent) of the workers in this branch averaged 30.0 and under 32.5 cents an hour, and over half averaged less than 45 cents an hour. The importance of earnings around 30 cents, and again around 40 cents, appears to reflect the different concentrations of white and Negro workers. This point is discussed in a later section of this article.

Smoking tobacco.—The wage structure of this branch was on a higher level than obtained for any other branch except cigarettes. The concentration of employees in the middle-wage brackets is notable and is believed to reflect a smaller difference in skill requirements

than is found in the other branches. Less than 6.0 percent of the workers in this branch had average hourly earnings under 40.0 cents. Nearly half (48.6 percent) of the earnings were concentrated in the range of 50.0 and under 67.5 cents an hour, and over three-fourths (77.8 percent) had averages of 40.0 and under 67.5 cents an hour.

Snuff.—The wage structure of the snuff branch of the industry was on a somewhat lower level than that of the cigarette and smoking-tobacco branches. No snuff workers were found earning less than 30.0 cents an hour. About a sixth (16.2 percent) of the workers averaged less than 40.0 cents an hour, and 15.1 percent earned 40.0 and under 42.5 cents. Over half of the workers (53.0 percent) averaged under 50.0 cents an hour.

Leaf processing.—This branch maintained the lowest wage scale in the industry. No workers were found, however, earning less than 30 cents an hour. Furthermore, only 20.5 percent of the employees of leaf-processing plants averaged under 40.0 cents an hour, whereas in the higher-wage chewing-tobacco branch, over 40 percent of the workers had averages under 40.0 cents an hour. Over a third (35.4 percent) of the leaf-processing workers earned 40.0 and under 42.5 cents on the average, and nearly two-thirds (63.2 percent) had average hourly earnings of 40.0 and under 50.0 cents. Only 16.3 percent of the workers of this branch exceeded 50 cents an hour.

VARIATIONS BY SEX AND COLOR

It has been noted that this industry presents a remarkable balance of employment between males and females, about half of the workers belonging to each sex. The distribution of the workers by color (56 percent white and 44 percent Negro) is also rather even. By and large, each sex-color group constitutes approximately one-fourth of the industry. White males constitute 28 percent, Negro males 21 percent, white females 28 percent, and Negro females 23 percent.

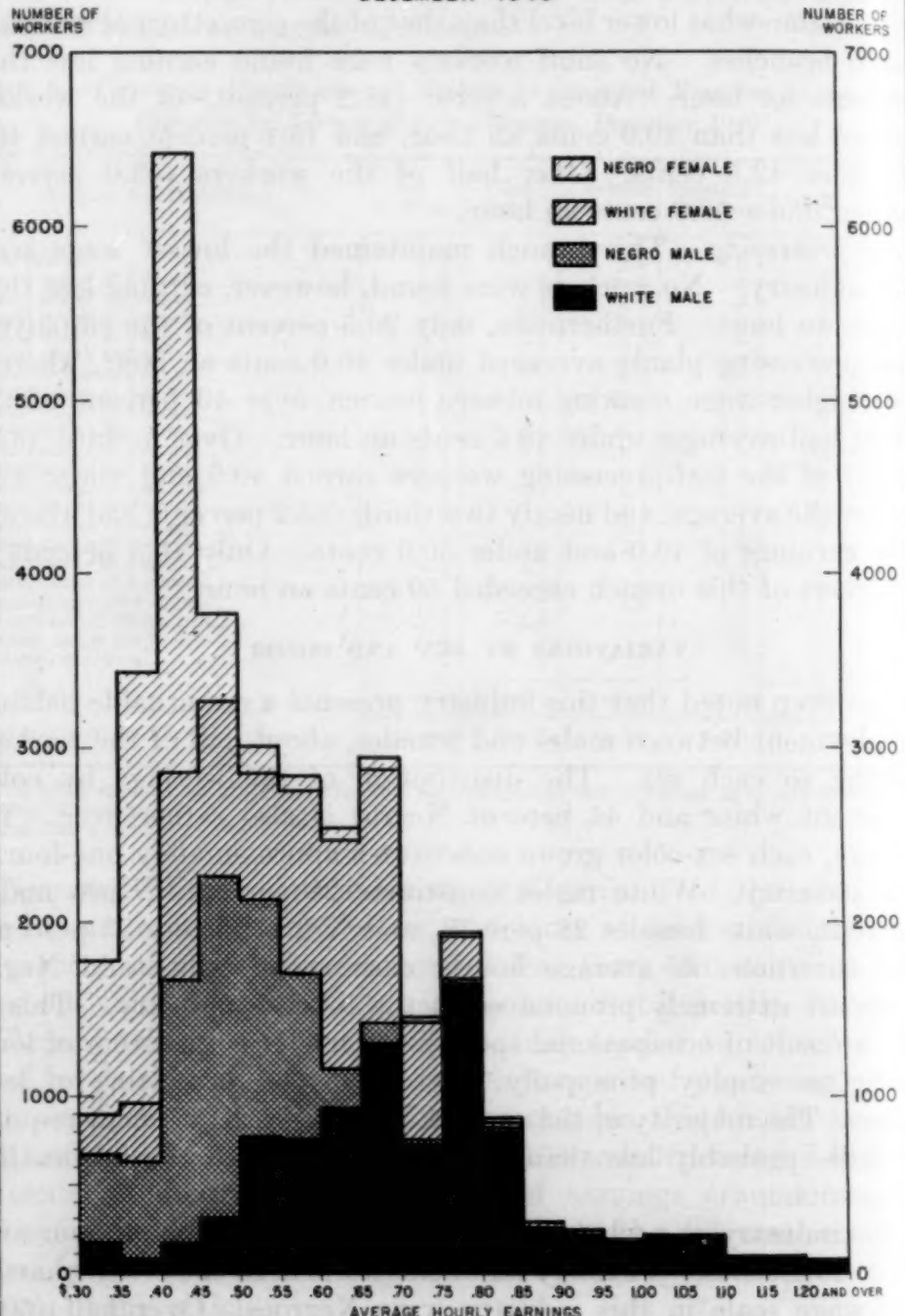
The variations in average hourly earnings of white and Negro workers are extremely pronounced in the tobacco industry. This is partly a result of occupational specialization. It is a custom of long standing to employ principally Negroes in the processing of leaf tobacco. The majority of the occupations in this department require little skill—probably less than most of the tasks of the fabricating departments.

In the industry as a whole, whites averaged 61.4 cents an hour and Negroes 43.4 cents. Virtually all of the workers in the lower quarter of the wage scale in this industry were Negroes. Over half (50.5 percent) of the more than 15,000 Negroes for which distributions are shown had average hourly earnings under 42.5 cents (table 7) as compared with only 9.6 percent of the whites. Nearly three-fourths (73.8 percent) of the Negroes averaged less than 47.5 cents

CHART 2.

DISTRIBUTION OF WORKERS IN THE CIGARETTE, CHEWING AND SMOKING TOBACCO, AND SNUFF INDUSTRY

BY AVERAGE HOURLY EARNINGS, SEX, AND COLOR
DECEMBER 1940



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

an hour, whereas nearly 85 percent of the whites exceeded that figure. Thirty-five percent of the whites earned 67.5 cents or more an hour, a level reached by only 1 percent of the Negroes. Approximately two-thirds of the Negro workers earned 35.0 and under 47.5 cents an hour, with over a fifth (21.2 percent) averaging 40.0 and under 42.5 cents.

TABLE 7.—*Percentage Distribution of Workers in the Cigarette, Chewing and Smoking Tobacco, and Snuff Industry, by Average Hourly Earnings, Sex, and Color, December 1940*¹

Average hourly earnings	All workers			Male			Female		
	Total	White	Negro	Total	White	Negro	Total	White	Negro
Under 30.0 cents.....	0.1	0.1	0.1	0.1	0.1	(2)	0.1	0.1	0.1
30.0 and under 32.5 cents.....	3.3	1.7	5.2	3.6	1.6	6.0	3.0	1.7	4.4
32.5 and under 35.0 cents.....	2.2	.6	4.0	.5	.2	.9	3.8	1.0	6.8
35.0 and under 37.5 cents.....	5.4	1.4	10.0	2.3	.5	4.6	8.5	2.3	15.1
37.5 and under 40.0 cents.....	5.2	1.0	10.0	1.6	.3	3.1	8.9	1.8	16.6
40.0 and under 42.5 cents.....	12.5	4.8	21.2	4.2	.8	8.5	20.8	9.1	33.4
42.5 and under 45.0 cents.....	7.3	3.1	12.3	6.1	1.1	12.3	8.6	5.2	12.2
45.0 and under 47.5 cents.....	7.1	3.6	11.0	8.8	2.1	17.1	5.4	5.3	5.4
47.5 and under 50.0 cents.....	4.5	3.9	5.3	5.1	1.3	9.8	4.0	6.7	1.0
50.0 and under 52.5 cents.....	6.5	5.3	7.9	9.3	4.5	15.2	3.7	6.2	1.0
52.5 and under 57.5 cents.....	8.8	10.2	7.2	11.2	9.3	13.3	6.5	11.1	1.5
57.5 and under 62.5 cents.....	7.3	10.8	3.3	8.4	10.8	5.5	6.1	10.9	1.1
62.5 and under 67.5 cents.....	10.2	17.7	1.5	8.8	14.3	2.1	11.6	21.7	.9
67.5 and under 72.5 cents.....	5.6	10.0	.6	5.3	8.7	1.0	6.0	11.4	.3
72.5 and under 77.5 cents.....	5.1	9.2	.3	7.8	13.8	.4	2.3	4.3	.1
77.5 and under 82.5 cents.....	4.1	7.6	.1	7.9	14.1	.2	.3	.5	.1
82.5 and under 87.5 cents.....	1.2	2.2	(2)	2.1	3.9	-----	.2	.3	(2)
87.5 and under 92.5 cents.....	.7	1.4	(2)	1.3	2.4	(2)	.1	.2	-----
92.5 and under 100.0 cents.....	.8	1.4	(2)	1.4	2.6	(2)	.1	.2	-----
100.0 and under 110.0 cents.....	1.3	2.4	(2)	2.6	4.6	(2)	(2)	(2)	-----
110.0 and under 120.0 cents.....	.6	1.1	-----	1.1	2.1	-----	-----	-----	-----
120.0 cents and over.....	.2	.5	-----	.5	.9	-----	(2)	(2)	-----
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers.....	32,484	17,362	15,122	16,339	9,039	7,300	16,145	8,323	7,822

¹ This table excludes 5,652 workers who were not reported in such a manner as to permit inclusion in frequency distributions.

² Less than a tenth of 1 percent.

On the whole, the female workers tended to receive lower average earnings than did males; only 3.0 percent of all the women received wages of 72.5 cents an hour or more, while nearly one-fourth (24.7 percent) of the men earned such wages. Fully 45.1 percent of the women earned less than 42.5 cents per hour, while only 23.1 percent of the males earned such wages. The distribution of workers by average hourly earnings, presented in chart 2, distinguishes the various sex-color groups.

OCCUPATIONAL DIFFERENCES

The highest average hourly wage reported for any occupation in the industry was the average of 94.5 cents an hour earned by the 444 machinists (table 8). Machine adjusters (671) with an average of 89.3 cents an hour had the next highest earnings. These are relatively unimportant occupations as compared to male floor workers (4,127

TABLE 8.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings of Workers in the Cigarette, Chewing and Smoking Tobacco, and Snuff Industry, by Sex and Occupation, December 1940

Sex and occupation	Number of employees	Average hourly earnings	Average weekly hours ¹	Average weekly earnings
Males	18,630	\$0.506	39.3	\$23.41
Blenders and bulkers	398	.498	38.2	19.03
Cappers	198	.568	32.3	18.37
Carton packers	76	.518	32.4	16.78
Casers	289	.499	40.0	19.92
Case sealers	136	.553	39.0	21.58
Cigarette-making-machine operators	1,691	.737	39.9	29.37
Classers	89	.373	37.6	14.05
Coopers	154	.491	38.0	18.62
Cutters and granulators	279	.537	39.0	20.91
Cutting-machine feeders	258	.534	38.5	20.53
Driers	445	.515	39.6	20.40
Elevator operators	177	.511	40.0	20.45
Engineers, power plant	60	.847	41.5	35.14
Factory clerks	371	.725	41.5	30.10
Firemen, power plant	139	.674	41.4	27.92
Floor workers	4,127	.493	39.2	19.32
Foremen	304	.783	41.5	32.51
Foremen, assistant	168	.727	40.9	29.74
Inspectors	290	.632	38.7	24.44
Janitors	977	.470	39.6	18.59
Labelers and stampers	80	.451	39.9	17.97
Lump-machine operators	314	.606	35.1	21.30
Machine adjusters	671	.893	40.9	36.51
Machinists	444	.945	40.8	38.57
Maintenance helpers	500	.628	40.5	25.43
Maintenance mechanics	503	.835	41.4	34.51
Ordering-machine operators	280	.478	39.1	18.70
Packers, case	247	.565	39.7	22.43
Packers, hand	108	.514	37.2	19.13
Packers, machine	1,207	.684	37.3	25.48
Pickers and searchers	189	.427	37.3	15.93
Pot-mill operators	85	.474	37.6	17.83
Productive helpers	119	.450	38.3	17.25
Shape hands	88	.556	36.2	20.09
Shipping clerks	87	.667	43.6	29.06
Stemmers, hand	183	.450	36.9	16.64
Stencilers and markers	100	.536	38.8	20.79
Truck drivers	153	.654	41.4	27.07
Truckers, hand	926	.495	39.7	19.63
Twisters	262	.539	33.7	18.17
Watchmen	425	.564	41.9	23.62
Weighers	100	.555	39.8	22.10
Miscellaneous direct workers	669	.578	39.8	22.98
Miscellaneous indirect workers	264	.593	39.3	23.33
Females	19,506	.477	37.8	18.05
Blenders and bulkers	177	.388	36.7	14.23
Cappers	518	.549	32.6	17.87
Carton banders and wrappers	232	.490	37.1	18.17
Carton packers	857	.558	37.8	21.08
Cellophane-machine operators	431	.530	39.2	20.78
Cigarette catchers	1,163	.573	38.8	22.24
Cigarette-making-machine operators	302	.539	39.3	21.16
Classers	181	.446	34.9	15.55
Factory clerks	140	.578	39.7	22.94
Floor workers	835	.408	38.3	15.62
Forewomen	56	.607	40.9	24.85
Inspectors	1,405	.598	38.9	23.25
Janitors	503	.409	37.4	15.27
Labelers and stampers	596	.471	39.7	18.67
Ordering-machine operators	119	.421	39.0	16.39
Packers, case	144	.450	38.9	17.49
Packers, hand	498	.497	38.0	18.90
Packers, machine	1,191	.590	38.5	22.74
Pickers and searchers	4,832	.391	37.7	14.76
Productive helpers	117	.456	38.8	17.70
Ripping-machine operators	53	.392	37.1	14.57
Stemmers, hand	1,543	.417	35.7	14.86
Stemmers, machine	2,225	.439	37.9	16.64
Twisters	98	.458	34.5	15.80
Weighers	228	.552	39.1	21.56
Wrapping-machine operators	354	.668	39.3	26.21
Miscellaneous direct workers	631	.521	37.6	19.58
Miscellaneous indirect workers	77	.525	39.7	20.85

¹ Refers to "hours paid for" discussed earlier in this report.

employees) who earned 49.3 cents an hour on the average, and female pickers and searchers (4,832 employees) whose average was only 39.1 cents an hour. The 2,225 female machine stemmers earned an average of 43.9 cents, and the average for the 1,543 female hand stemmers was 41.7 cents an hour. The four groups last mentioned contain over a third of the wage earners included in the study.

Other important occupations include male operators of cigarette-making machines (1,691 employees), with an average of 73.7 cents an hour, and female inspectors (1,405 employees), averaging 59.8 cents an hour.

The occupational averages for male workers were generally higher than the averages for female workers performing the same type of work. For illustration, female blenders and bulkers averaged about 20 percent less than males in the same occupation. Comparable differentials were found in all of the more important occupations where both sexes were represented. The lowest average hourly pay (37.3 cents an hour), however, was for male classers. Reversing the customary relationship, female classers received somewhat higher earnings (44.6 cents) than the males.

DISTRIBUTION OF PLANTS BY AVERAGE WAGE LEVEL

In table 9 the establishments in each branch of the industry are grouped according to the plant average hourly wage. This grouping reveals that individual plants within each branch tended to vary considerably in the average wages paid.

TABLE 9.—*Distribution of Plants in Specified Branches of the Tobacco Industry, by Plant Average Hourly Earnings, December 1940*

Plant average hourly earnings	All branches	Cigarette	Chewing tobacco	Smoking tobacco	Snuff	Leaf processing
30.0 and under 35.0 cents	19		4	6		9
35.0 and under 40.0 cents	13	2	6	3		2
40.0 and under 45.0 cents	20	2	7	5	3	3
45.0 and under 50.0 cents	17	3	2	5	2	5
50.0 and under 55.0 cents	14	7	1	4	2	
55.0 and under 60.0 cents	6		2	3	1	
60.0 and under 65.0 cents	6		1	5		
65.0 and under 70.0 cents	6	4	1		1	
70.0 cents and over	5	5				
Total	106	23	24	31	9	19
Number of workers	38, 136	25, 425	1, 574	5, 224	1, 269	4, 644

Over a third (9) of the plants manufacturing cigarettes had averages above 65 cents an hour and over two-thirds (16) paid more than 50 cents. About two-fifths (12) of the smoking-tobacco plants paid average wages of more than 50 cents an hour and over two-thirds paid average wages of more than 40 cents per hour. Contrasted with this are the averages for plants manufacturing chewing tobacco, over two-

thirds of which paid average hourly wages of less than 45 cents. No leaf-processing plant paid average wages of as much as 50 cents an hour, 11 of the 19 paying less than 40 cents.

The averages for snuff plants are confined to a relatively small range, seven of the nine plants having averages within the 15-cent spread of 40 and under 55 cents. The similarity of plant averages in this branch of the industry is due to the small number of plants and the even smaller number of companies which manufacture snuff.

The segregation of plants into groups with similar average wage levels is helpful in understanding the distribution of individual workers by average hourly earnings. For purposes of showing the distributions of workers, however, it is necessary to employ somewhat broader groupings than those presented in table 9. Tables 10, 11, and 12 indicate the distribution of workers by classified hourly earnings for plants with similar average wage levels and in specified branches of the industry.

Cigarettes.—Examination of the distribution of employees by plant average groups indicates that as plant averages rise, low average hourly earnings (i. e., under 40.0 cents an hour) tend to be eliminated. For example, in cigarette plants with average pay of 65.0 cents per hour or more, less than one-tenth of 1 percent of the workers were found earning under 40.0 cents an hour (table 10). In plants paying less than 45.0 cents an hour on the average, over 40.0 percent of the employees averaged under 40.0 cents.

TABLE 10.—Percentage Distribution of Employees in the Cigarette Branch by Average Hourly Earnings, in Plants with Specified Average Wage Levels, December 1940¹

Average hourly earnings	Percentage distribution of workers in plants paying average hourly earnings of—			Average hourly earnings	Percentage distribution of workers in plants paying average hourly earnings of—		
	35.0 and under 45.0 cents	45.0 and under 55.0 cents	65.0 ² cents and over		35.0 and under 45.0 cents	45.0 and under 55.0 cents	65.0 ² cents and over
Under 30.0 cents	1.7	(³)	—	67.5 and under 72.5 cents	0.9	3.2	15.2
30.0 and under 32.5 cents	17.2	1.3	(³)	72.5 and under 77.5 cents	—	3.3	14.3
32.5 and under 35.0 cents	9.4	1.9	—	77.5 and under 82.5 cents	—	2.3	12.5
35.0 and under 37.5 cents	6.8	9.4	(³)	82.5 and under 87.5 cents	—	.8	2.2
37.5 and under 40.0 cents	6.8	10.2	—	87.5 and under 92.5 cents	—	.7	.4
40.0 and under 42.5 cents	6.8	12.2	0.3	92.5 and under 100.0 cents	—	.6	.9
42.5 and under 45.0 cents	9.4	9.8	2.7	100.0 and under 110.0 cents	—	.5	4.0
45.0 and under 47.5 cents	7.7	7.2	2.3	110.0 and under 120.0 cents	—	.4	1.4
47.5 and under 50.0 cents	12.0	5.2	.2	120.0 cents and over	—	.2	.3
50.0 and under 52.5 cents	6.8	4.8	7.2	Total	100.0	100.0	100.0
52.5 and under 57.5 cents	8.5	7.9	11.1	Number of employees	117	13,609	6,661
57.5 and under 62.5 cents	3.4	7.7	8.2				
62.5 and under 67.5 cents	2.6	10.4	16.8				

¹ This table excludes 4,948 workers who were not reported in such a manner as to permit inclusion in frequency distributions.

² There were no plants with averages between 55 cents and 65 cents an hour.

³ Less than a tenth of 1 percent.

Approximately two-thirds (13,699) of the workers in cigarette manufacturing were in plants whose average hourly pay fell in the range 45.0 and under 55.0 cents, and only 117 workers were employed in plants which paid, on the average, less than 45.0 cents an hour.

Chewing and smoking tobacco and snuff.—In the manufacture of chewing and smoking tobacco and snuff over half of the workers (57.0 percent) averaged less than 32.5 cents an hour in plants whose averages fell below 35.0 cents (table 11). No workers received such earnings in plants which paid above 50.0 cents an hour on the average. In these branches 1,527 workers (20.7 percent) were employed in plants paying average hourly wages of less than 45.0 cents. On the other hand, 4,589 workers (62.3 percent) were in plants which paid above 55.0 cents on the average.

TABLE 11.—Percentage Distribution of Employees in Chewing and Smoking Tobacco and Snuff Branches, in Plants with Specified Wage Levels, December 1940¹

Average hourly earnings	Percentage distribution of workers in plants paying average hourly earnings of—						
	30.0 and under 35.0 cents	35.0 and under 40.0 cents	40.0 and under 45.0 cents	45.0 and under 50.0 cents	50.0 and under 55.0 cents	55.0 and under 60.0 cents	60.0 cents and over
Under 30.0 cents.....	2.4	0.7	1.7				
30.0 and under 32.5 cents.....	57.4	35.7	14.5	1.7			
32.5 and under 35.0 cents.....	14.1	11.2	10.1	.6		0.1	
35.0 and under 37.5 cents.....	13.5	15.3	15.2	3.3	5.7	.5	(²)
37.5 and under 40.0 cents.....	3.0	6.6	9.5	.4	7.7	.6	0.5
40.0 and under 42.5 cents.....	2.4	7.1	11.0	41.3	2.5	9.7	.6
42.5 and under 45.0 cents.....	2.4	4.8	6.2	9.1	1.3	5.7	2.0
45.0 and under 47.5 cents.....	1.8	5.9	6.2	7.7	20.2	2.8	18.7
47.5 and under 50.0 cents.....	1.2	2.3	6.0	2.5	5.3	9.4	2.5
50.0 and under 52.5 cents.....	1.8	4.1	5.0	2.2	27.2	10.3	13.2
52.5 and under 57.5 cents.....		3.9	6.0	18.7	4.8	14.2	7.3
57.5 and under 62.5 cents.....		.7	2.0	3.1	5.3	18.1	9.4
62.5 and under 67.5 cents.....		1.3	3.2	3.2	5.3	14.0	14.7
67.5 and under 72.5 cents.....		.2	1.1	2.2	2.5	6.1	7.7
72.5 and under 77.5 cents.....			.8	.8	2.8	2.0	6.2
77.5 and under 82.5 cents.....			.4	.8	2.0	1.0	5.7
82.5 and under 87.5 cents.....				.5	.3	1.9	3.2
87.5 and under 92.5 cents.....			.4	.6	4.5	.9	2.5
92.5 and under 100.0 cents.....			.3	.7	1.3	1.1	2.3
100.0 and under 110.0 cents.....		.2	.3	.4	1.0	.6	2.0
110.0 and under 120.0 cents.....				.1	.3	.7	.7
120.0 cents and over.....			.1	.1		.3	.8
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of employees.....	164	609	754	848	399	2,309	2,280

¹ This table excludes 704 workers who were not reported in such a manner as to permit inclusion in frequency distributions.

² Less than a tenth of 1 percent.

Leaf processing.—In this branch over half (52.3 percent) of the employees in plants with averages of 30.0 and under 40.0 cents averaged less than 32.5 cents, and 92.7 percent of the workers in this group of plants averaged under 37.5 cents an hour. In the group of plants averaging 40.0 cents an hour and over, 42.5 percent of the employees earned 40.0 and under 42.5 cents an hour and over three-fourths (76.1 percent) received 40.0 cents and under 50.0 cents an hour.

TABLE 12.—Percentage Distribution of Employees in Leaf-Processing Branch, in Plants with Specified Wage Levels, December 1940

Average hourly earnings	Percentage distribution of workers in plants paying average hourly earnings of—		Average hourly earnings	Percentage distribution of workers in plants paying average hourly earnings of—	
	30.0 and under 40.0 cents	40.0 cents and over		30.0 and under 40.0 cents	40.0 cents and over
Under 30.0 cents.....			67.5 and under 72.5 cents.....	0.4	0.5
30.0 and under 32.5 cents.....	52.3	0.1	72.5 and under 77.5 cents.....	.1	.6
32.5 and under 35.0 cents.....	26.9	.7	77.5 and under 82.5 cents.....	.1	.3
35.0 and under 37.5 cents.....	13.5	1.1	82.5 and under 87.5 cents.....		.1
37.5 and under 40.0 cents.....	.6	2.6	87.5 and under 92.5 cents.....	.2	.2
40.0 and under 42.5 cents.....	2.9	42.5	92.5 and under 100.0 cents.....	.1	.4
42.5 and under 45.0 cents.....	.5	13.3	100.0 and under 110.0 cents.....		.5
45.0 and under 47.5 cents.....	.5	10.9	110.0 and under 120.0 cents.....		.2
47.5 and under 50.0 cents.....	.2	9.4	120.0 cents and over.....		.1
50.0 and under 52.5 cents.....	.7	6.0			
52.5 and under 57.5 cents.....	.6	7.5	Total.....	100.0	100.0
57.5 and under 62.5 cents.....	.4	1.7			
62.5 and under 67.5 cents.....		1.3	Number of employees.....	832	3,812

Average Weekly Hours and Weekly Earnings

Average weekly "hours paid for" and average weekly earnings for all employees included in the survey have been presented by branch of the industry in table 4. In the industry as a whole, employees averaged 38.5 hours per week. The highest average (39.2 hours) was found in Virginia, and the lowest (37.4 hours) in the "other States" region (table 4). The averages for North Carolina (38.5 hours), Kentucky (38.8 hours), and Tennessee (38.4 hours) each approximated the industry average. The lowest average weekly hours of work (32.5 hours) were in the North Carolina and Virginia region for the chewing-tobacco branch. The highest average hours (39.9) were worked in the snuff branch.

TABLE 13.—Percentage Distribution of Employees in the Cigarette, Smoking and Chewing Tobacco, and Snuff Industry, by Weekly Hours and by Sex, December 1940¹

Weekly hours paid for	All workers	Male	Female
Under 8 hours.....	0.2	0.2	0.1
8 and under 16 hours.....	.8	.8	.8
16 and under 24 hours.....	1.8	1.4	2.3
24 and under 32 hours.....	4.6	4.5	4.7
32 and under 34 hours.....	4.0	3.5	4.6
34 and under 36 hours.....	1.7	1.4	2.1
36 and under 38 hours.....	6.8	4.1	9.6
38 and under 40 hours.....	16.1	9.7	22.6
Exactly 40 hours.....	52.6	58.8	46.3
Over 40 and under 42 hours.....	5.4	7.7	3.0
42 and under 44 hours.....	1.0	1.9	.2
44 and under 48 hours.....	2.6	2.4	2.7
48 and under 52 hours.....	1.0	1.5	.5
52 and under 56 hours.....	.6	1.0	.1
56 and under 60 hours.....	.4	.4	.4
60 hours and over.....	.4	.7	(²)
Total.....	100.0	100.0	100.0
Number of employees.....	32,484	16,339	16,145

¹ This table excludes 5,652 workers who were not reported in such a manner as to permit inclusion in frequency distribution.

² Less than a tenth of 1 percent.

Over half of the workers (52.6 percent) worked exactly 40 hours per week and 36 percent worked less than that number. Table 13 reveals that fewer than 12 percent of the employees worked for more than 40 hours and only 6 percent exceeded 42 hours.

Further examination of the table reveals that nearly 59 percent of the males and over 46 percent of the females worked exactly 40 hours per week. The males, however, exceeded 40 hours with greater relative frequency than did the females, over 15 percent of the former and less than 7 percent of the latter having worked in excess of 40 hours in the week reported.

Weekly earnings for all employees (table 4) averaged \$20.67. The interregional variations tended to follow the same pattern as for the average hourly earnings, with the exception that the Virginia average (\$20.98) was higher than the average of \$20.87 for North Carolina. The average of \$15.93 recorded for Tennessee was lower than any other regional average. Workers in the leaf-processing branch earned on the average \$16.99 per week, the leaf workers in Kentucky and Tennessee averaging but \$12.06. The only other branch paying unusually low wages was the chewing-tobacco branch, where average weekly wages were \$17.49, the workers in North Carolina and Virginia averaging but \$11.54, and those in Kentucky and Tennessee \$13.62. In the other branches, the lowest average of weekly earnings in any region was approximately \$20.

The distributions of workers by weekly earnings (table 14) show that over half (51.5 percent) of the workers earned less than \$20. Earnings of male workers ranged upward to over \$65 a week, while no female worker was reported as earning in excess of \$42.50 per week. Sixty-four percent of the males earned above \$20 weekly, as compared with only 32.9 percent of the females.

TABLE 14—Percentage Distribution of Employees in the Cigarette, Smoking and Chewing Tobacco, and Snuff Industry, by Weekly Earnings and Sex, December 1940¹

Weekly earnings	All workers	Male	Female	Weekly earnings	All workers	Male	Female
Under \$2.50.....	0.1	0.2	0.1	\$35.00 and under \$37.50.....	0.8	1.4	0.1
\$2.50 and under \$5.00.....	.5	.4	.5	\$37.50 and under \$40.00.....	.6	1.2	(2)
\$5.00 and under \$7.50.....	.6	.5	.8	\$40.00 and under \$42.50.....	.6	1.2	(1)
\$7.50 and under \$10.00.....	1.6	1.5	1.7	\$42.50 and under \$45.00.....	.8	1.6	.....
\$10.00 and under \$12.50.....	3.6	2.1	5.2	\$45.00 and under \$47.50.....	.3	.6	.....
\$12.50 and under \$15.00.....	10.8	4.3	17.3	\$47.50 and under \$50.00.....	.1	.2	.....
\$15.00 and under \$17.50.....	19.9	11.0	28.7	\$50.00 and under \$55.00.....	.2	.3	.....
\$17.50 and under \$20.00.....	14.4	16.0	12.8	\$55.00 and under \$60.00.....	.1	.3	.....
\$20.00 and under \$22.50.....	12.6	16.8	8.5	\$60.00 and under \$65.00.....	.1	.2	.....
\$22.50 and under \$25.00.....	8.5	10.8	6.1	\$65.00 and over.....	.1	.1	.....
\$25.00 and under \$27.50.....	10.8	9.7	12.0				
\$27.50 and under \$30.00.....	4.8	4.9	4.7	Total.....	100.0	100.0	100.0
\$30.00 and under \$32.50.....	6.3	11.3	1.3				
\$32.50 and under \$35.00.....	1.8	3.4	.2	Number of employees.....	32,484	16,339	16,145

¹ This table excludes 5,652 workers who were not reported in such a manner as to permit inclusion in frequency distributions.

² Less than a tenth of 1 percent.

Earnings and Hours of Office Workers

AVERAGE HOURLY EARNINGS

Office employees of the tobacco industry averaged 81.3 cents an hour in December 1940 (table 15). This average is based on reports covering 2,001 employees of whom 1,037 were females and 964 were males. Male office workers averaged 90.5 cents an hour, which was 25.9 percent higher than the average of 71.9 cents earned by the women. Over a third (37.2 percent) of the men had average hourly earnings of \$1.00 or more an hour, while only 10 percent of the women reached \$1.00 an hour. The averages for over 57.0 percent of the women were found within the 25-cent range of 52.5 and under 77.5 cents an hour.

TABLE 15.—Percentage Distribution of Office Workers in Cigarette, Chewing and Smoking Tobacco, and Snuff Industry, by Average Hourly Earnings and Sex, December 1940¹

Average hourly earnings	All workers	Male	Female	Average hourly earnings	All workers	Male	Female
Under 37.5 cents.....	0.4	0.5	0.3	100.0 and under 110.0 cents..	8.4	13.2	4.0
37.5 and under 42.5 cents....	1.4	.8	1.9	110.0 and under 120.0 cents..	5.5	8.5	2.7
42.5 and under 47.5 cents....	2.7	2.4	2.9	120.0 and under 130.0 cents..	4.1	6.3	2.0
47.5 and under 52.5 cents....	5.7	4.9	6.4	130.0 and under 140.0 cents..	2.0	3.3	.7
52.5 and under 57.5 cents....	8.2	4.2	12.0	140.0 and under 150.0 cents..	1.3	2.4	.2
57.5 and under 62.5 cents....	6.7	5.6	7.7	150.0 and under 160.0 cents..	.7	1.3	.2
62.5 and under 67.5 cents....	8.8	5.8	11.6	160.0 and under 170.0 cents..	.3	.5	.....
67.5 and under 72.5 cents....	11.1	6.8	15.2	170.0 and under 180.0 cents..	.5	.8	.1
72.5 and under 77.5 cents....	8.7	6.2	11.3	180.0 cents and over.....	.5	.9	.1
77.5 and under 82.5 cents....	7.0	7.0	7.1				
82.5 and under 87.5 cents....	6.6	6.5	6.7	Total.....	100.0	100.0	100.0
87.5 and under 92.5 cents....	4.9	6.3	3.6				
92.5 and under 100.0 cents....	4.5	5.8	3.3	Number of workers.....	1,975	956	1,019

¹ This table excludes 26 workers who were not reported in such a manner as to permit inclusion in frequency distributions.

AVERAGE WEEKLY HOURS

Office employees in this industry rarely worked more than 40 or less than 34 hours per week (table 16), 96 percent of all office workers being reported within that range. Nearly 40 percent of the employees worked exactly 40 hours. Differences between men and women in average hours were not pronounced. There was, however, a tendency for shorter hours to obtain for female office workers. The men averaged 38.5 hours, compared to an average of 37.1 hours for the women. The largest group of female workers (41.1 percent) fell in the class interval of 34 and under 36 hours while the largest group of the male workers (47.6 percent) was at exactly 40 hours. Less than 1.0 percent of the females exceeded 40 hours.

TABLE 16.—Percentage Distribution of Office Workers in the Cigarette, Chewing and Smoking Tobacco, and Snuff Industry, by Weekly Hours and Sex, December 1940¹

Weekly hours paid for	All workers	Male	Female	Weekly hours paid for	All workers	Male	Female
Under 16 hours.....	0.1	-----	0.1	44 and under 48 hours.....	1.0	1.7	0.4
16 and under 24 hours.....	.2	-----	.4	48 and under 52 hours.....	1.0	1.6	.4
24 and under 32 hours.....	.3	0.1	.5	52 and under 56 hours.....	.1	.2	-----
32 and under 34 hours.....	.3	.2	.3	56 and under 60 hours.....	.2	.4	-----
34 and under 36 hours.....	32.2	22.6	41.1	60 hours and over.....	.1	.2	-----
36 and under 38 hours.....	22.4	21.4	23.4				
38 and under 40 hours.....	2.1	2.8	1.4	Total.....	100.0	100.0	100.0
Exactly 40 hours.....	39.3	47.6	31.9				
Over 40 and under 42 hours.....	.4	.7	.1	Number of workers.....	1,975	956	1,019
42 and under 44 hours.....	.3	.5	-----				

¹ This table excludes 26 workers who were not reported in such a manner as to permit inclusion in frequency distributions.

AVERAGE WEEKLY EARNINGS

Office workers in this industry averaged \$30.61 a week. The average for men was \$34.87 while women averaged but \$26.65 (table 17). There were no large groups of male workers at any particular level of weekly earnings. Each of 11 different \$2.50 class intervals included at least 5.0 percent of the employees, and there was a fairly uniform distribution in the wide range from \$15 to \$60 a week. The women, however, had weekly earnings which were confined within a comparatively limited range. Nearly two-thirds of the female workers (63.6 percent) earned \$20 and less than \$30 a week.

TABLE 17.—Percentage Distribution of Office Workers in the Cigarette, Chewing and Smoking Tobacco, and Snuff Industry, by Weekly Earnings and Sex, December 1940¹

Weekly earnings	All workers	Male	Female	Weekly earnings	All workers	Male	Female
Under \$12.50.....	0.4	0.1	0.6	\$42.50 and under \$45.00.....	3.0	5.2	1.0
\$12.50 and under \$15.00.....	.4	.5	.2	\$45.00 and under \$47.50.....	3.2	5.8	.8
\$15.00 and under \$17.50.....	3.6	3.9	3.3	\$47.50 and under \$50.00.....	2.0	3.6	.5
\$17.50 and under \$20.00.....	5.0	3.9	6.0	\$50.00 and under \$55.00.....	2.8	5.3	.4
\$20.00 and under \$22.50.....	12.5	6.4	18.3	\$55.00 and under \$60.00.....	1.8	3.3	.3
\$22.50 and under \$25.00.....	11.5	6.9	16.1	\$60.00 and under \$65.00.....	.5	.9	-----
\$25.00 and under \$27.50.....	12.4	8.4	16.3	\$65.00 and under \$70.00.....	.3	.4	.1
\$27.50 and under \$30.00.....	10.7	8.5	12.9	\$70.00 and under \$75.00.....	.2	.3	.1
\$30.00 and under \$32.50.....	9.0	8.1	9.9	\$75.00 and over.....	.4	.7	-----
\$32.50 and under \$35.00.....	5.7	7.0	4.4				
\$35.00 and under \$37.50.....	5.1	6.8	3.5	Total.....	100.0	100.0	100.0
\$37.50 and under \$40.00.....	3.8	5.5	2.2				
\$40.00 and under \$42.50.....	5.7	8.5	3.1	Number of workers.....	1,975	956	1,019

¹ This table excludes 26 workers who were not reported in such a manner as to permit inclusion in frequency distributions.

Changes in Earnings, 1935-40

The last previous survey of wages and hours in the tobacco industry was conducted by the Bureau in 1935. In that survey data were obtained for a pay-roll period in March 1935, just after the NRA code for the industry went into effect.

A comparison of the wage structure revealed by that study with that revealed by the 1940 study shows that important changes have taken

place in the last 5 years. Average hourly earnings in the industry as a whole rose by roughly one-quarter during the 5-year period.

For purposes of more detailed comparison six of the more important occupations have been selected. These occupations represented 49.3 percent of the employees in 1935 and 45.3 percent of the workers in 1940 (table 18). The slight decline in the importance of the six selected occupations is largely due to a reduction of the percentage of hand stemmers, caused by the inroads of the stemming machine. Hand stemmers in 1935 constituted 9.6 percent of the workers and only 4.5 percent in the present survey. There was a considerable increase in average hourly earnings in each of the six occupations during the 5-year period. These increases range from 21 percent for floor workers to over 46 percent for packing-machine operators. The occupations are arranged in ascending order of the average hourly earnings. It will be observed that the order is the same for both 1935 and 1940.

TABLE 18.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings in Selected Occupations of the Cigarette, Chewing and Smoking Tobacco, and Snuff Industry, March 1935 and December 1940

Occupation	Average hourly earnings			Average weekly hours			Average weekly earnings		
	March 1935	December 1940	Per-cent of in-crease	March 1935	December 1940 ¹	Per-cent of in-crease	March 1935	December 1940	Per-cent of in-crease
Pickers and searchers.....	\$0.311	\$0.393	26.4	32.5	37.7	16.0	\$10.11	\$14.81	46.5
Stemmers, hand.....	.325	.420	29.2	33.0	35.8	8.5	10.73	15.05	40.3
Floor workers.....	.396	.479	21.0	34.0	39.0	14.7	13.49	18.70	38.6
Cigarette catchers.....	.418	.572	36.8	30.9	38.8	25.6	12.92	22.20	71.8
Packers, machine.....	.436	.637	46.1	32.9	37.9	15.2	14.37	24.12	67.8
Cigarette-making-machine operators.....	.508	.707	39.2	32.3	39.8	23.2	16.37	28.13	71.8

¹ Refers to "hours paid for," discussed earlier in this report.

It is significant that average hourly earnings for the three lowest-paid occupations increased relatively less than those of the three higher-paid occupations. The earnings differences for these groups were consequently larger in December 1940 than in March 1935.

There was a marked increase in average weekly hours between March 1935 and December 1940. The increases varied from 8.5 percent for hand stemmers to 25.6 percent for cigarette catchers. The hours reported for 1940, it will be recalled, refer to "hours paid for" rather than hours worked, and are consequently slightly exaggerated. In 1935, on the other hand, production was low and there was considerable pressure to spread employment by working short hours. In the case of average hours, as in the case of average earnings, the percent of increase tended to be greater for the more highly paid occupations.

Increases in average weekly earnings ranged from 38.6 percent in the case of floor workers to 71.8 percent for cigarette catchers and for cigarette-making-machine operators.



WAGE-RATE CHANGES IN AMERICAN INDUSTRIES

THE following table gives information concerning wage-rate adjustments occurring during the month ending October 15, 1941, as shown by reports received from manufacturing and nonmanufacturing establishments which supply employment data to this Bureau.

As the Bureau's survey does not cover all establishments in an industry, and, furthermore, as some firms may have failed to report wage-rate changes, these figures should not be construed as representing the total number of wage changes occurring in manufacturing and nonmanufacturing industries.

Wage-Rate Changes Reported by Manufacturing and Nonmanufacturing Establishments During Month Ending October 15, 1941¹

Group and industry	Establishments		Employees		Average percent- age change in wage rates of employ- ees hav- ing in- creases
	Total num- ber cov- ered	Num- ber re- porting in- creases	Total num- ber cov- ered	Num- ber re- porting in- creases	
All manufacturing.....	33,612	1,186	7,772,557	400,060	8.7
Durable goods.....	12,548	411	4,284,944	132,940	9.8
Nondurable goods.....	21,064	775	3,487,613	267,120	8.2
Iron and steel and their products, not including ma- chinery.....	2,558	83	1,103,255	22,589	6.5
Blast furnaces, steel works, and rolling mills.....	336	8	575,509	1,986	7.9
Cast-iron pipe.....	68	8	20,196	1,360	10.2
Forgings, iron and steel.....	95	6	19,362	1,829	8.3
Hardware.....	159	3	52,092	184	2.3
Plumbers' supplies.....	111	3	28,646	731	11.4
Stamped and enameled ware.....	241	9	51,167	1,180	9.9
Steam and hot-water heating apparatus and steam fittings.....	111	4	47,032	4,187	3.1
Stoves.....	238	10	41,731	1,485	8.5
Structural and ornamental metalwork.....	287	5	36,657	128	7.8
Tools (not including edge tools, machine tools, files, and saws).....	132	4	20,916	451	8.2
Wirework.....	174	8	30,664	922	5.4
Screw-machine products.....	80	3	20,905	779	9.8
Machinery, not including transportation equipment.....	3,835	120	1,251,535	24,914	7.8
Electrical machinery, apparatus, and supplies.....	607	22	337,650	6,641	9.2
Engines, turbines, water wheels, and windmills.....	76	3	103,757	338	9.9
Foundry and machine-shop products.....	2,243	61	401,944	10,063	6.8
Machine tools.....	198	8	97,919	1,866	9.0
Textile machinery and parts.....	122	6	25,611	715	8.3
Machine-tool accessories.....	111	4	21,570	337	4.6
Refrigerators and refrigerating apparatus.....	64	4	33,527	1,317	8.5
Transportation equipment.....	844	31	1,081,746	50,256	13.4
Aircraft.....	116	7	263,977	40,132	15.2
Automobiles.....	402	13	469,276	6,312	5.0
Cars, electric and steam-railroad.....	67	3	48,526	917	12.1
Shipbuilding.....	219	6	268,955	1,637	8.0

See footnotes at end of table.

*Wage-Rate Changes Reported by Manufacturing and Nonmanufacturing Establishments
During Month Ending October 15, 1941¹—Continued*

Group and industry	Establishments		Employees		Average percent- age change in wage rates of employ- ees hav- ing in- creases
	Total num- ber cov- ered	Num- ber re- porting in- creases	Total num- ber cov- ered	Num- ber re- porting in- creases	
Nonferrous metals and their products.....	1,090	42	257,992	14,127	7.8
Brass, bronze, and copper products.....	352	13	96,813	2,539	6.1
Jewelry.....	201	6	20,207	709	9.9
Lighting equipment.....	87	3	16,706	487	9.6
Smelting and refining—copper, lead, and zinc.....	57	10	33,014	9,286	7.9
Lumber and allied products.....	2,711	99	362,346	16,408	8.7
Furniture.....	719	37	116,187	7,254	9.8
Lumber:					
Millwork.....	566	15	43,235	1,618	6.0
Sawmills.....	665	26	131,092	6,119	5.7
Wooden boxes, other than cigar.....	132	6	13,325	531	6.4
Mattresses and bed springs.....	196	9	14,225	376	7.2
Stone, clay, and glass products.....	1,510	36	228,070	4,646	8.1
Cement.....	127	3	22,838	406	7.8
Glass.....	147	11	71,185	2,675	7.6
Pottery.....	119	6	30,515	669	9.4
Lime.....	65	3	4,527	163	9.0
Textiles and their products.....	6,867	378	1,443,694	158,294	7.9
Fabrics.....	3,711	267	1,074,854	142,118	7.4
Cotton goods.....	812	111	444,015	26,971	4.7
Cotton small wares.....	139	4	16,517	234	7.9
Dyeing and finishing textiles.....	230	22	58,633	9,729	7.8
Hosiery.....	478	50	114,564	16,572	9.4
Knitted outerwear.....	220	6	19,617	602	6.5
Knitted underwear.....	140	3	41,626	1,003	6.6
Knitted cloth.....	82	4	7,436	340	10.0
Silk and rayon goods.....	452	12	72,551	6,784	7.9
Woolen and worsted goods.....	408	32	168,120	13,890	9.1
Cordage and twine.....	59	5	15,164	853	6.8
Housefurnishings, other.....	73	3	7,398	338	5.7
Wearing apparel.....	3,156	111	368,840	16,176	12.9
Clothing, men's.....	1,115	32	158,133	3,789	11.6
Clothing, women's.....	1,282	34	102,091	2,984	10.3
Corsets and allied garments.....	65	4	11,327	561	9.3
Men's furnishings.....	149	8	15,742	1,029	14.3
Shirts and collars.....	259	32	56,349	7,795	13.0
Leather and its manufactures.....	1,084	36	251,103	11,539	8.0
Boots and shoes.....	514	15	173,670	6,151	7.3
Leather.....	168	9	38,989	4,446	8.2
Boot and shoe cut stock and findings.....	125	5	10,558	279	5.8
Food and kindred products.....	5,271	80	567,594	10,604	8.4
Baking.....	1,018	11	83,525	1,930	8.8
Beverages.....	609	5	43,924	226	4.6
Butter.....	319	4	5,980	6	7.4
Canning and preserving.....	1,051	7	134,119	265	9.2
Confectionery.....	281	8	46,022	2,254	6.3
Flour.....	336	9	15,418	453	7.0
Slaughtering and meat packing.....	321	11	127,753	2,472	8.7
Tobacco manufactures.....	228	7	74,488	1,793	7.9
Chewing and smoking tobacco and snuff.....	42	3	11,463	357	10.0
Cigars and cigarettes.....	168	4	44,489	1,436	7.3
Paper and printing.....	3,998	111	417,728	13,236	6.1
Boxes, paper.....	658	22	52,853	983	6.8
Paper and pulp.....	439	32	145,026	9,258	5.7
Printing and publishing:					
Book and job.....	1,560	25	84,618	1,025	5.9
Newspapers and periodicals.....	728	19	64,672	767	5.7
Paper goods, not elsewhere classified.....	151	8	25,436	1,097	8.8
Lithographing.....	84	3	7,875	45	7.8

See footnotes at end of table.

**Wage-Rate Changes Reported by Manufacturing and Nonmanufacturing Establishments
During Month Ending October 15, 1941¹—Continued**

Group and industry	Establishments		Employees		Average percent- age change in wage rates of employ- ees hav- ing in- creases
	Total num- ber cov- ered	Num- ber re- porting in- creases	Total num- ber cov- ered	Num- ber re- porting in- creases	
Chemical, petroleum, and coal products.....	2,248	114	386,227	53,954	9.4
Chemicals.....	234	36	79,617	20,841	8.5
Explosives.....	43	14	17,070	7,007	7.3
Fertilizers.....	305	6	12,898	274	9.4
Paints and varnishes.....	497	22	24,825	4,512	5.7
Petroleum refining.....	172	6	77,079	3,734	7.2
Rayon and allied products.....	29	5	51,297	12,970	14.5
Coke-oven products.....	26	3	9,249	1,253	9.0
Roofing materials.....	28	4	4,671	500	8.0
Rubber products.....	258	9	140,852	3,240	7.9
Miscellaneous.....	1,110	40	205,927	14,460	7.9
Fabricated plastic and wood-pulp products.....	74	3	21,431	2,079	7.0
Buttons.....	53	5	6,348	439	5.0
Instruments, professional, scientific, and commer- cial.....	68	7	20,912	5,097	8.6
Pianos, organs and parts.....	46	4	7,974	1,680	9.2
Surgical and orthopedic appliances.....	49	6	9,561	2,105	4.6
All nonmanufacturing (except building construction).....	² 92,480	833	3,137,900	72,256	5.3
Coal mining:					
Anthracite ³	² 80	45	60,100	35,467	2.5
Bituminous.....	² 1,010	3	244,800	379	17.0
Metalliferous mining.....	² 390	14	79,000	4,636	9.1
Quarrying and nonmetallic mining.....	² 1,140	10	45,000	745	11.3
Crude petroleum production.....	² 490	24	39,900	4,963	6.0
Electric light and power.....	² 2,850	38	257,500	8,096	8.8
Manufactured gas.....	² 170	3	35,900	544	13.1
Street railways and busses.....	² 350	6	134,200	1,089	5.9
Wholesale trade.....	² 14,830	273	354,300	6,023	6.8
Retail trade.....	² 52,670	385	1,119,600	4,204	7.9
Hotels.....	² 1,940	15	147,100	3,849	9.9
Laundries.....	² 1,210	8	84,700	316	8.7
Dyeing and cleaning.....	² 870	3	19,400	52	6.5
Brokerage.....	² 1,270	3	18,900	26	11.0

¹ Figures are not given for some industries to avoid disclosure of information concerning individual establishments. They are, however, included where practicable in "all manufacturing," and in the various industry groups. No decreases were reported.

² Approximate—based on previous month's sample.

³ Includes only those collieries explicitly reporting wage-rate increases in connection with their October employment reports to this Bureau. It is assumed, however, that the increase was general throughout the industry, as provided in the Anthracite Agreement of May 20, 1941.

HOURLY EARNINGS IN THE FURNITURE INDUSTRY: A CORRECTION

THE September 1941 Monthly Labor Review contained an article (p. 741) on hourly earnings in the furniture industry for February 1941. In table 8 (p. 754) the percentage of "all workers" receiving "30.0 and under 32.5 cents" in 1941 should have been 11.2 instead of 1.2, and in table 14 (p. 760) the number of "porch and camp furniture" workers receiving "30.0 and under 32.5 cents" should have been 329 instead of 3,329.

DECREASE OF REAL WAGES IN DENMARK IN 1940 AND 1941

BOTH money and real wages were steadily rising in Denmark before its invasion by Germany, but the "new order" introduced by the German occupation authorities resulted in a steady decrease of real wages in that country, as the following figures from the official statistical bulletin of Denmark ¹ show:

Wages received in—	Index of real wages (1935=100)
1939, the last pre-invasion year.....	101
1940, invasion year.....	92
1940: August and September, under new order.....	90
1941: January, February, and March, under new order.....	85

Thus, during the first 10 months under the "new order" the Danish wage earners lost 16 percent of their former real wages.



LENGTH OF THE WORKWEEK IN FRANCE

AN ARTICLE published in France in the *Agence Économique et Financière* of October 9, 1941, gives the average weekly hours of work in the occupied and the nonoccupied zones.²

In the occupied zone the average workweek in June 1941 was 39.2 hours, as compared with 38.5 hours in May and 35.9 hours in December 1940. In the nonoccupied zone the average was 38.4 hours in June, 38.0 in May, and 37.4 in December 1940. In December 1940 the average working week was 1½ hours less in the occupied zone than in the nonoccupied zone, but in June 1941 it was 0.8 hour longer.

A classification of employed persons in the occupied and nonoccupied zones, according to the weekly hours of work in June 1941, showed the following:

	Occupied zone	Nonoccupied zone
Over 48 hours.....percent..	16. 6	9. 1
Over 40 but less than 48 hours.....do....	12. 4	11. 5
40 hours.....do....	42. 5	46. 6
Over 32 but less than 40 hours.....do....	10. 7	13. 1
Over 24 but less than 32 hours.....do....	6. 5	12. 8
Less than 24 hours.....do....	7. 5	3. 2

In the occupied zone, industries working more than 40 hours per week in June 1941 were the wood and metal industries, excavation and construction, stonework, transportation, and various commercial enterprises. In the nonoccupied zone industries working longer than the normal week of 40 hours were the chemical industries, wood and metal industries, earthworks, stonework, and various branches of

¹ Statistiske Efterretninger (Copenhagen), September 29, 1941.

² Data are from report of H. Freeman Matthews, First Secretary of United States Embassy, Vichy, France.

commerce. The textile industries were averaging only 30.2 hours in the occupied zone and 31.4 hours in the nonoccupied zone; hides and skins, 34.6 hours in the occupied zone as compared with 36.9 hours in the nonoccupied zone; while the other industries in both zones were working more than 35 hours per week.



FAMILY ALLOWANCES IN ITALY

THE family-allowance system was made general in Italy by the decree of June 17, 1937,¹ which effected very important changes in the internal organization of the previous system. This decree simplified procedure, increased the allowances and the State's subsidies, and strengthened the administration in the sectors of industry and of agriculture. A special fund was created for workers in each of four groups—industry, commerce, banks and insurance establishments, and agriculture. These four funds are administered by the National Institute of Social Insurance. By a collective agreement of August 3, 1937, these allowances were extended to workers in the liberal professions.

For some years following 1929, by virtue of collective agreements, the total cost of allowances had been met by the employers in industry, commerce, and agriculture; this had already been the case for employers in the credit and insurance field. The purpose of the 1937 provisions would seem to be the avoidance in a difficult period of a general increase in wages, while at the same time ameliorating the situation of workers with family responsibilities. Furthermore, it served to emphasize the fact that family allowances constituted an integral part of the general wage policy of the Italian Government, according to the *Revue du Travail* (Brussels) of March 1941, from which the following data are taken. Collective agreements concluded in 1940 extended the right of allowance to the wife, parents, and certain other relatives dependent on the worker, even when they do not live under the same roof with him. These allowances are also paid by employers.

By a law of August 6, 1940, the Italian Government announced the discontinuance of its contribution to the family-allowance system and gave legal confirmation to the previous abrogation of the workers' obligation to contribute. It also extended the system to employees of State administrations and public establishments insofar as they were not already receiving family aid.

The law stated that "surplus resources should be utilized for the financing of courses in vocational education and for promoting the development of the family spirit."

¹ See *Monthly Labor Review*, May 1939 (pp. 1036-37).

Finances

From the financial viewpoint, the present organization of family allowances is based principally upon the creation of a single fund which replaces the four separate funds previously existing. This single fund is operated by the National Fascist Institute of Social Insurance. It assures reimbursement for the industrial branches where there is a deficit. Separate accounts are kept for each of the four groups, industry, commerce, credit and insurance, and agriculture, but a part of the total resources is allocated to reserves with which to meet any deficits. At the end of each fiscal period each section establishes the balance between total contributions and the amount of allowances paid, including the expenses of administration and control. If there is a deficit in one section it is covered by the surplus of other sections.

The financial contributions of the different groups have made unnecessary any assistance by the State, such as was provided for industry and commerce in the decree of June 17, 1937.

Funds for the payment of allowances come from employers' contributions, based upon their gross pay roll, as follows:

	Percent of gross pay roll
Industry.....	8. 00
Commerce.....	6. 25
Liberal and artistic professions.....	6. 25
Credit and insurance establishments:	
Public banks.....	12. 75
Other banks, brokers' offices, etc.....	9. 25
Insurance establishments.....	8. 20
Insurance agents.....	9. 70
Agriculture:	
Employees.....	8. 00
	<i>Lire</i>
Laborers.....	1. 50 per day

The percentages are computed in such a way as to equalize in each branch of industry the contributions and dues to cover the expenses of administration and control and to assure a surplus sufficient for the realization of the other objectives.

The amounts of the family allowances were not changed by the act of August 1940, and are as follows, according to the article under review.

Amounts of Family Allowances in Italy, 1940

Employment group	Amounts of allowances				
	1 child	2 or 3 children	4 or more children	Wife	Each parent
Agriculture:	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>
Workers.....per day	0.45	0.70	0.90	1.10	0.60
Employees.....do	1.10	1.45	1.75	1.70	1.10
Industry:					
Workers.....per week	4.20	6.00	7.00	7.00	4.20
Employees.....do	6.60	8.70	10.50	10.20	6.60
Commerce:					
Workers.....per month	16.80	24.00	31.20	25.20	14.40
Employees.....do	26.40	34.80	42.00	36.00	21.60
Credit and insurance establishments:					
Workers.....do	40.00	45.00	50.00	50.00	30.00
Employees in banks.....do	100.00	105.00	135.00	110.00	70.00
Liberal professions:					
Workers.....do	16.80	24.00	31.20	25.20	14.40
Employees.....do	26.40	34.80	42.00	36.00	21.60

The law has definitely regulated family allowances in agriculture. Henceforth only workers registered on the lists of agricultural workers will have the right to family allowances. These grants are made only on the basis of days of actual work, the number of days not to exceed 26 per month for permanent workers. For workers who are not permanently occupied, the allowances are fixed for each Province in accordance with the presumed number of days of work, regular, occasional, or exceptional. The rate of allowance is now fixed at 1.50 lire per day, but pending the establishment of the total amount that can be paid, according to the contributions, the rate of 0.50 lira will be maintained and will be gradually increased to 1.50 lire. Temporarily, the allowance is no longer paid in its entirety.

The family-allowance scheme for the agents of administrations and public institutions is also definitely regulated. In general, for this class of workers their family situation is taken into account in their salaries. They receive either supplements for their wives and dependent children or special cost-of-living bonuses. The law relates only to the few agents who have not been receiving these benefits.

Cost of Allowances

During the period from December 15, 1934, to December 31, 1939, the total amount of allowances paid increased to the sum of approximately 2,500,000,000 lire including 1,915,000,000 for industry, 144,000,000 lire for commerce, 268,000,000 lire for agriculture, and 40,000,000 lire for credit and insurance.

It was estimated that the cost of allowances in 1940 would reach 1,500,000,000 lire.

Wage and Hour Regulation

MINIMUM RATES UNDER FAIR LABOR STANDARDS ACT

*40-Cent Rate for Miscellaneous-Apparel Industry.*¹

A 40-CENT minimum hourly wage in the miscellaneous-apparel industry was established, effective December 15, 1941, for workers subject to the provisions of the Fair Labor Standards Act. As a result of the Administrator's wage order the hourly wage rate of approximately 7,000 workers was expected to be raised. Over 21,000 employees are engaged in the miscellaneous-apparel industry as defined for the purposes of fixing the minimum wage. The industry includes the manufacture of robes, neckwear, suspenders and garters, covered buttons and buckles, and artificial flowers and feathers for use on apparel.

*40-Cent Minimum for Passenger Motor-Carrier Industry.*²

By order of the Administrator of the wage and hour law a 40-cent minimum hourly wage became effective in the passenger motor-carrier industry on January 5, 1942. Few of the over-the-road employees receive hourly pay below the minimum fixed by the wage order. Of the 36,000 employees in the industry, approximately 4,000 benefited from the Administrator's action. These workers are maintenance and office workers, red caps, and other employees of bus-terminal companies. Employees of local motorbus carriers are, of course, not covered by the act.

WAGE DETERMINATIONS UNDER PUBLIC CONTRACTS ACT

*37.5-Cent Wage for Textile Industry.*³

AN HOURLY wage of 37.5 cents or \$15 for a week of 40 hours became effective in the textile industry on December 17, 1941, for all work performed on Government contracts under the terms of the Public

¹ U. S. Department of Labor. Wage and Hour Division. Press release No. R. 1654.

² Idem. Press release No. R. 1663.

³ Federal Register for November 18, 1941 (pp. 5852, 5853).

Contracts Act. In making this determination the Secretary of Labor adopted the prevailing minimum previously established by wage order under the Fair Labor Standards Act.⁴

*40- and 50-Cent Wage for Leather Industry*⁵

By the terms of a wage determination issued by the Secretary of Labor the minimum wage for employees in the leather industry engaged in the performance of Government contracts is fixed at 40 or 50 cents an hour, depending upon the branch of industry and the geographic area. These rates became effective on December 17, 1941.

A minimum of 50 cents an hour or \$20 per week of 40 hours is payable for the tanning, currying, and finishing of leather (including rawhide) from any type of hide or skin in the States of Maine, Vermont, New Hampshire, New York, Massachusetts, Rhode Island, Connecticut, New Jersey, Maryland, Pennsylvania, Delaware, Ohio, Indiana, Michigan, Wisconsin, Illinois, Missouri, Iowa, Minnesota, North Dakota, South Dakota, Nebraska, Kansas, New Mexico, Colorado, Wyoming, Montana, Idaho, Utah, Arizona, Nevada, California; Oregon, Washington, and the District of Columbia. The rate of pay is 40 cents hourly or \$16 per week of 40 hours in the States of West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida, Arkansas, Louisiana, Oklahoma, and Texas.

Regardless of where the product is made, 40 cents an hour or \$16 a week of 40 hours is the established rate of pay on public contracts in the manufacture of welting and power-transmission belting when made wholly or principally of leather.

*Extension of Aircraft Determination*⁶

The wage determination of the Secretary of Labor under the Public Contracts Act establishing a prevailing minimum wage of 50 cents an hour or \$20 per week of 40 hours in the manufacture of airplanes, aircraft engines, and propellers⁷ was recently extended to include employees engaged in the manufacture of certain aircraft parts and accessories including ignition equipment. Under the terms of the determination the 50-cent rate became effective on Government contracts on and after November 18, 1941.

⁴ See Monthly Labor Review for July 1941 (p. 170).

⁵ Federal Register for November 18, 1941 (pp. 5851, 5852).

⁶ U. S. Department of Labor. Division of Public Contracts. Press release No. 2206.

⁷ See Monthly Labor Review for October 1940 (p. 814).

REGULATION OF WAGES AND WORKING CONDITIONS IN BELGIUM

WAGES and salaries in Belgium were regulated by an order issued May 29, 1941, by the Minister of Economic Affairs, the Minister of Agriculture and Supply, the Minister of Labor and Social Welfare, the Minister of Communications, and the Wages and Prices Commissioner.¹ The order applies to workers engaged under a contract of employment, but does not include domestic workers and public administrative staffs.

The minimum gross hourly rates of pay for industrial workers were fixed at 5 Belgian francs for men and 3.50 francs for women; for agricultural workers the rates were, respectively, 3.80 francs and 2.70 francs; while for salaried employees the monthly rate was 1,000 francs for men and 800 francs for women. In calculating the minimum rates, account will be taken of payments in kind such as free board and lodging. An increase of 8 percent on the gross earnings of all workers and employees, exclusive of payments in kind, is provided for, except in the case of those who had received an increase in wages or salaries after May 10, 1940. Any increase beyond this limit is prohibited.

Exceptions to this order may be granted by the Wages and Prices Commissioner, who also may fix rates of wages and salaries, and cancel existing contracts, if he considers this action necessary for social or economic reasons. His decisions are binding. The commissioner is also empowered to settle any disputes arising out of the application of the order.

Regulation of conditions of employment was provided for by an order of June 21, 1941. A General Labor Regulation Officer, appointed by the head of the Ministry of Labor and Social Welfare in agreement with the Wages and Prices Commissioner, will have power to regulate the conditions of employment other than rates of wages and salaries. He will be assisted by an assistant general officer, labor regulation officers, and committees of social experts. The duties of the General Labor Regulation Officer will be to watch over the maintenance of social peace; carry out existing acts and royal orders which regulate employment conditions for specified branches of activity or occupations; give instructions regarding the rules of employment of undertakings and individual contracts of employment or apprenticeship; and furnish regular reports to the Ministry of Labor and Social Welfare on the situation and social requirements of the various branches of industrial activity.

The committees of social experts will be appointed from lists of candidates submitted by the union of wage-earning and salaried employees and groups of employers consulted for this purpose. The

¹ Data are from *International Labor Review* (Montreal), November 1941.

members of these committees serve as experts and not as representatives of a particular group or interest.

The General Labor Regulation Officer, in agreement with the head of the Ministry or the Wages and Prices Commissioner, will appoint subordinate officers who are empowered to visit workplaces and obtain any information from employers which may be required for the purpose of securing observance of the regulations. Penalties are fixed for employers who cause or allow their workers or apprentices to work in contravention of the regulations.



BRAZILIAN WAGE INCREASES NOT PART OF BASIC WAGE ¹

WAGE increases granted to employees in Brazil during the 6 months from November 10, 1941, are to be considered as bonuses only, for the purpose of labor legislation, according to decree-law No. 3813, of that date. The decree-law reads as follows:

Increases in wages, which shall have been granted spontaneously by employers to their employees, within a period of 6 months as from the date of this decree-law, shall be considered as allowances (*abonos*) both for the effects of law No. 62 of June 5th, 1935,² and of other enactments referring to the economic stability of workers, as well as of the deductions provided for in the laws on social welfare, and such allowances shall not be included in the wages or other remuneration already being received.

It is understood that this legislation was promulgated in order to permit Brazilian textile mills to increase their production by the introduction of piece rates, without increasing their liabilities under labor legislation. The labor law stipulates that all payments to employees, of whatever nature, shall be considered as wages, and therefore the textile mills could not pay on a piece-work basis without total earnings being considered as basic wages for the purposes of labor legislation (indemnity to employees upon discharge, etc.). The present decree-law solves the problem by permitting the increased earnings to be considered as allowances and not wages.

¹ Data are from report of Rudolf E. Cahn, United States vice consul at Rio de Janeiro, November 21, 1941.

² Dismissal compensation law (see Monthly Labor Review, May 1936, pp. 1227-1228).

Labor Turn-Over

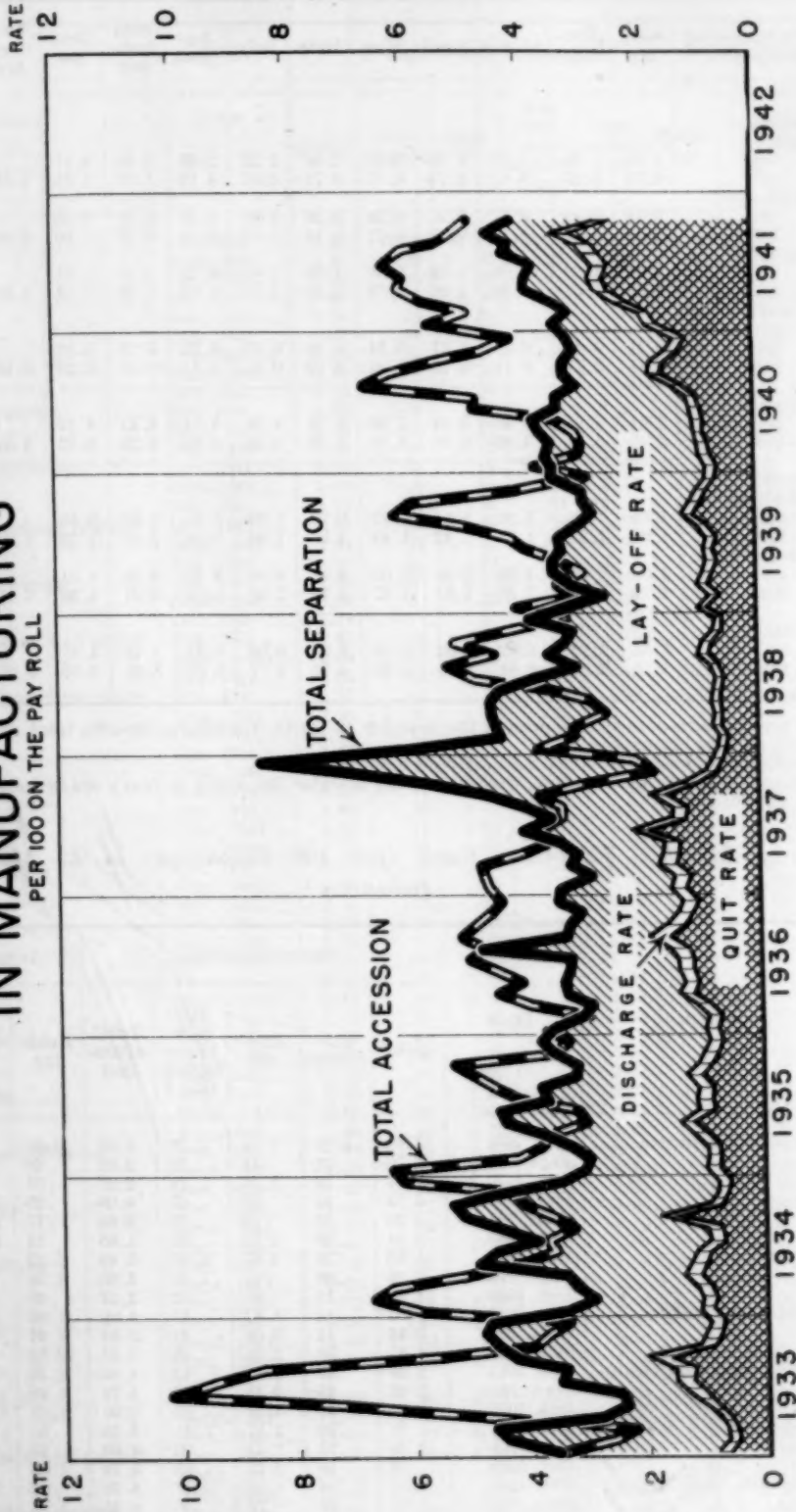
LABOR TURN-OVER IN MANUFACTURING, OCTOBER 1941

THE hiring of wage earners in the manufacturing industries covered in the Bureau of Labor Statistics monthly turn-over survey fell substantially during October 1941. The October 1941 accession rate (4.87) declined from 5.16 per 100 employees in September and from 5.52 in October 1940. This decline was attributed largely to decreased hirings in the automobile, iron and steel, and building-materials industries. The accession rate in the automobile industry (4.27) was about half that reported a year previously, and reflected the current curtailment of production to conserve raw materials. In the iron and steel industry the accession rate declined to 1.97, the lowest recorded since April 1940. Other industries showing substantial reductions in accessions were brass, bronze, and copper products, electrical machinery, foundries and machine shops, and engines, turbines, and water wheels. Two important key defense industries continued to report high accession rates—shipbuilding (14.60) and aircraft (10.62).

Lay-offs were higher in October than in September, although lower than in October 1940. Serious shortages of copper, zinc, nickel, and steel were largely responsible for an increase in lay-offs in the brass, bronze, and copper industry, and shortages of steel accounted for increased lay-offs in structural and ornamental iron work. Lack of raw silk forced lay-offs in dyeing and finishing mills.

Voluntary separations for the combined manufacturing industries surveyed declined slightly from September to October, but the quit rate of 2.11 per 100 employees was higher than in any October since 1929. Virtually all industries reported higher quit rates than in 1940, with the largest increases occurring in the lumber and lumber products industries. Military separations advanced during October, in contrast to the steady declines noted during the previous 6-month period. In October the military separation rate was 0.21 per 100 employees, as compared with 0.13 in September and the peak of 0.32 reached in March 1941.

LABOR TURN-OVER RATES IN MANUFACTURING PER 100 ON THE PAY ROLL



UNITED STATES BUREAU OF LABOR STATISTICS

TABLE 1.—Monthly Labor Turn-Over Rates in Representative Factories in 135 Industries¹

Class of turn-over and year	January	February	March	April	May	June	July	August	September	October	November	December	Average
Separations:													
Quits:													
1941	1.31	1.33	1.70	2.08	2.20	2.06	2.25	2.46	2.81	2.11			
1940	0.63	0.62	0.67	0.74	0.77	0.78	0.85	1.10	1.37	1.31	1.10	0.99	0.91
Discharges:													
1941	0.18	0.19	0.21	0.25	0.24	0.26	0.29	0.30	0.31	0.28			
1940	0.14	0.16	0.15	0.13	0.13	0.14	0.14	0.16	0.16	0.19	0.18	0.16	0.15
Lay-offs: ²													
1941	1.61	1.20	1.06	1.19	1.08	1.03	1.40	1.13	1.16	1.41			
1940	2.55	2.67	2.53	2.69	2.78	2.32	2.25	1.63	1.48	1.53	1.60	1.86	2.16
Miscellaneous separations:													
1941	0.31	0.43	0.43	0.37	0.34	0.36	0.30	0.25	0.25	0.33			
1940	0.11	0.11	0.11	0.10	0.10	0.12	0.11	0.11	0.21	0.20	0.18	0.15	0.13
Total:													
1941	3.41	3.15	3.40	3.89	3.86	3.71	4.24	4.14	4.53	4.13			
1940	3.43	3.56	3.46	3.66	3.78	3.36	3.35	3.00	3.22	3.23	3.06	3.16	3.35
Accessions:													
Rehirings:													
1941	1.45	1.08	1.24	1.04	0.92	0.90	1.04	1.11	0.87	0.86			
1940	1.96	1.26	1.38	1.42	1.49	2.06	1.94	3.04	2.20	1.22	1.18	1.13	1.09
New hirings:													
1941	4.09	3.84	4.38	5.00	5.03	5.41	4.96	4.32	4.29	4.01			
1940	1.78	1.72	1.57	1.63	1.87	2.70	2.83	3.59	4.01	4.30	3.47	2.98	2.70
Totals:													
1941	5.54	4.92	5.62	6.04	5.95	6.31	6.00	5.43	5.16	4.87			
1940	3.74	2.98	2.94	3.05	3.36	4.76	4.77	6.63	6.21	5.52	4.65	4.11	4.39

¹ The various turn-over rates represent the number of quits, discharges, lay-offs, total separations, and accessions per 100 employees.

² Including temporary, indeterminate, and permanent lay-offs.

³ Beginning with September, 1940, workers leaving to enter the Army or Navy are included in "miscellaneous separations."

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in 42 Manufacturing Industries¹

Industry	Date	Separation rates					Accession rates		
		Quit ²	Discharge	Lay-off	Miscellaneous separation ³	Total separation	Rehiring	New hiring	Total accession
Agricultural implements	Oct. 1941	1.93	0.24	1.58	0.26	4.01	0.85	3.66	4.51
	Sept. 1941	1.72	.27	.44	.22	2.65	.88	2.72	3.60
Aircraft	Oct. 1941	.81	.12	1.16	.18	2.27	.83	2.97	3.80
	Sept. 1941	2.73	.55	.53	.27	4.08	.25	10.37	10.62
Aluminum	Oct. 1941	3.20	.43	.12	.19	3.94	.17	11.13	11.30
	Oct. 1940	2.34	.36	1.72	.23	4.65	.34	11.42	11.76
Automobiles and bodies	Oct. 1941	1.55	.36	3.93	1.65	6.49	2.23	2.30	4.53
	Sept. 1941	2.25	.38	.65	1.58	3.86	1.38	3.08	4.46
Automobile parts and equipment	Oct. 1941	1.24	.15	.66	.52	2.57	.95	4.13	5.08
	Oct. 1940	1.57	.18	1.87	.47	4.09	1.86	2.41	4.27
Boots and shoes	Oct. 1941	2.45	.14	3.04	.31	5.94	3.24	2.28	5.52
	Oct. 1940	1.35	.08	2.34	.18	3.95	2.82	6.97	9.79
Brass, bronze, and copper products	Oct. 1941	2.29	.37	1.86	.42	4.94	1.33	5.44	6.77
	Sept. 1941	2.66	.35	2.48	.22	5.71	1.99	6.12	8.11
Brick, tile, and terra cotta	Oct. 1941	1.80	.42	1.51	.18	3.91	1.31	8.86	10.17
	Oct. 1940	1.77	.19	1.37	.21	3.54	.85	2.83	3.68
Brass, bronze, and copper products	Oct. 1941	2.29	.25	1.35	.20	4.09	.82	2.53	3.35
	Oct. 1940	.93	.10	2.57	.18	3.78	1.08	1.42	2.50
Brick, tile, and terra cotta	Oct. 1941	2.37	.39	1.52	.47	4.75	.82	3.34	4.16
	Sept. 1941	2.81	.36	.72	.36	4.25	1.27	4.34	5.61
Brick, tile, and terra cotta	Oct. 1940	1.41	.44	.36	.20	2.41	.48	8.30	8.78
	Oct. 1941	1.97	.32	1.67	.24	4.20	.40	2.84	3.24
Brick, tile, and terra cotta	Sept. 1941	2.85	.34	1.93	.16	5.28	1.08	3.82	4.90
	Oct. 1940	1.31	.26	2.92	.21	4.70	1.80	4.23	6.03

See footnotes at end of table.

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in 42 Manufacturing Industries¹—Continued

Industry	Date	Separation rates					Accession rates		
		Quit ²	Dis-charge	Lay-off	Mis-cellaneous separation ²	Total separation	Rehir-ing	New hir-ing	Total acces-sion
Cast-iron pipe.....	Oct. 1941.....	1.48	0.42	0.25	0.28	2.43	0.78	2.84	3.62
	Sept. 1941.....	2.37	.39	.24	.23	3.23	.80	3.56	4.56
	Oct. 1940.....	.69	.05	.38	.06	1.18	.18	3.41	3.59
Cement.....	Oct. 1941.....	.91	.14	1.14	.29	2.48	.30	1.72	2.02
	Sept. 1941.....	1.86	.19	1.17	.15	3.37	.47	2.37	2.84
	Oct. 1940.....	.61	.13	1.63	.17	2.54	.49	1.14	1.63
Chemicals.....	Oct. 1941.....	1.39	.41	.71	.36	2.87	.29	3.72	4.01
	Sept. 1941.....	2.60	.24	.70	.28	3.82	.16	3.76	3.92
	Oct. 1940.....	1.28	.13	.74	.11	2.26	.67	2.76	3.43
Cigars and cigarettes.....	Oct. 1941.....	2.83	.09	.33	.14	3.39	1.16	3.61	4.77
	Sept. 1941.....	3.49	.11	1.45	.12	5.17	1.10	4.54	5.64
	Oct. 1940.....	1.70	.10	.72	.10	2.62	.76	2.54	3.30
Cotton manufacturing.....	Oct. 1941.....	3.46	.33	.81	.29	4.89	1.19	4.25	5.44
	Sept. 1941.....	4.08	.35	.65	.25	5.33	1.30	4.73	6.03
	Oct. 1940.....	2.16	.24	.86	.31	3.57	2.25	4.71	6.96
Dyeing and finishing textiles.....	Oct. 1941.....	3.01	.34	1.14	.28	4.77	1.36	3.68	5.04
	Sept. 1941.....	3.71	.27	.72	.22	4.92	.89	3.80	4.69
	Oct. 1940.....	1.61	.17	.70	.25	2.73	1.33	4.30	5.63
Electrical machinery.....	Oct. 1941.....	1.64	.28	1.02	.59	3.53	.39	3.68	4.07
	Sept. 1941.....	2.54	.30	1.23	.48	4.55	.50	4.39	4.89
	Oct. 1940.....	1.14	.17	.57	.35	2.23	1.08	6.26	7.34
Engines, turbines, and water wheels.....	Oct. 1941.....	1.61	.38	.46	.28	2.73	.74	5.12	5.86
	Sept. 1941.....	2.00	.44	.32	.15	2.91	.33	6.12	6.45
	Oct. 1940.....	1.34	.25	.21	.05	1.85	3.62	2.46	6.08
Foundries and machine shops.....	Oct. 1941.....	2.33	.44	1.42	.31	4.50	.50	4.46	4.96
	Sept. 1941.....	2.96	.40	1.07	.20	4.63	.37	4.99	5.36
	Oct. 1940.....	1.20	.22	.79	.16	2.37	.75	4.52	5.27
Furniture.....	Oct. 1941.....	3.35	.51	1.35	.38	5.59	.90	5.22	6.12
	Sept. 1941.....	4.28	.47	1.34	.28	6.37	.66	5.76	6.42
	Oct. 1940.....	1.44	.33	2.01	.26	4.04	.69	4.69	5.38
Glass.....	Oct. 1941.....	1.63	.26	1.48	.61	3.98	1.81	4.19	6.00
	Sept. 1941.....	2.53	.17	1.65	.28	4.63	1.54	3.12	4.66
	Oct. 1940.....	.73	.08	1.05	.30	2.16	2.20	4.38	6.58
Hardware.....	Oct. 1941.....	3.50	.35	1.18	.34	5.40	1.29	4.07	5.36
	Sept. 1941.....	3.98	.44	.69	.25	5.36	.35	5.32	5.67
	Oct. 1940.....	2.10	.26	.32	.13	2.81	.80	6.71	7.51
Iron and steel.....	Oct. 1941.....	1.36	.15	.51	.47	2.49	.37	1.60	1.97
	Sept. 1941.....	2.03	.11	.38	.31	2.83	.34	2.05	2.39
	Oct. 1940.....	.72	.08	.36	.20	1.36	.58	2.16	2.74
Knit goods.....	Oct. 1941.....	2.17	.27	1.74	.13	4.31	1.33	2.53	3.86
	Sept. 1941.....	2.77	.26	2.50	.11	5.64	1.06	2.80	3.86
	Oct. 1940.....	1.13	.13	1.08	.10	2.44	1.89	2.45	4.35
Machine tools.....	Oct. 1941.....	1.93	.44	.18	.15	2.70	.20	4.15	4.31
	Sept. 1941.....	2.76	.42	.14	.21	3.53	.21	5.00	5.26
	Oct. 1940.....	1.53	.35	.08	.15	2.11	.13	6.47	6.60
Men's clothing.....	Oct. 1941.....	1.49	.16	1.96	.10	3.71	1.07	2.36	3.43
	Sept. 1941.....	2.06	.22	1.66	.09	4.03	.70	2.74	3.44
	Oct. 1940.....	.98	.15	3.72	.47	4.92	1.78	2.20	3.98
Paints and varnishes.....	Oct. 1941.....	1.78	.29	1.17	.44	3.68	.12	2.59	2.71
	Sept. 1941.....	2.38	.26	1.21	.30	4.15	.26	3.06	3.32
	Oct. 1940.....	.97	.23	1.00	.11	2.31	.55	2.34	2.89
Paper and pulp.....	Oct. 1941.....	1.68	.27	1.07	.28	3.30	.48	3.20	3.68
	Sept. 1941.....	2.57	.30	1.05	.27	4.19	.44	3.03	3.47
	Oct. 1940.....	.83	.15	1.23	.43	2.64	.56	1.88	2.44
Petroleum refining.....	Oct. 1941.....	.53	.03	1.05	.42	2.03	.35	1.56	1.91
	Sept. 1941.....	1.55	.08	.81	.21	2.65	.33	2.66	2.99
	Oct. 1940.....	.37	.08	1.38	.21	2.04	.35	1.33	1.68
Planing mills.....	Oct. 1941.....	3.54	.47	1.49	.40	5.90	1.33	3.94	5.27
	Sept. 1941.....	4.84	.62	.91	.37	6.74	.74	6.84	7.58
	Oct. 1940.....	1.79	.26	1.92	.15	4.12	.89	6.78	7.67
Printing:									
Book and job.....	Oct. 1941.....	1.89	.29	2.54	.19	4.91	1.51	4.83	6.34
	Sept. 1941.....	2.92	.51	2.85	.14	6.42	1.59	5.38	6.97
	Oct. 1940.....	1.06	.17	2.18	.20	3.61	2.46	3.73	6.19
Newspapers and periodicals.....	Oct. 1941.....	.80	.14	1.23	.21	2.38	.92	1.24	2.16
	Sept. 1941.....	.75	.05	.95	.14	1.89	1.08	2.12	3.20
	Oct. 1940.....	.41	.03	.75	.22	1.41	1.15	1.25	2.40
Radios and phonographs.....	Oct. 1941.....	2.94	.28	.86	.16	4.24	.69	3.95	4.64
	Sept. 1941.....	3.38	.26	.71	.16	4.51	1.05	7.63	8.68
	Oct. 1940.....	2.42	.23	2.22	.16	5.03	1.12	3.77	4.89
Rayon and allied products.....	Oct. 1941.....	.88	.19	1.40	.39	2.86	.53	1.92	2.45
	Sept. 1941.....	1.33	.22	.80	.39	2.74	.29	1.55	1.84
	Oct. 1940.....	1.13	.24	.68	.22	2.27	.58	2.00	2.58

See footnotes at end of table.

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in 42 Manufacturing Industries ¹—Continued

Industry	Date	Separation rates					Accession rates		
		Quit ²	Dis-charge	Lay-off	Mis-cellaneous separation ³	Total separation	Rehir-ing	New hir-ing	Total acces-sion
Rubber boots and shoes.....	Oct. 1941.....	2.47	0.19	0.11	0.51	3.28	1.73	5.16	6.89
	Sept. 1941.....	3.33	.15	1.00	.62	5.10	1.12	3.85	4.97
	Oct. 1940.....	1.25	.14	.49	.47	2.35	1.96	3.23	5.19
Rubber tires.....	Oct. 1941.....	1.45	.09	1.23	.48	3.25	.79	1.39	2.18
	Sept. 1941.....	2.16	.13	1.17	.22	3.68	.50	2.03	2.53
	Oct. 1940.....	.57	.06	.90	.24	1.77	1.56	2.04	3.60
Sawmills.....	Oct. 1941.....	3.80	.34	2.44	.38	6.96	1.10	4.02	5.12
	Sept. 1941.....	4.62	.48	2.23	.34	7.67	1.18	5.42	6.60
	Oct. 1940.....	1.70	.22	2.54	.29	4.75	1.14	4.07	5.21
Shipbuilding.....	Oct. 1941.....	2.70	.54	2.38	.42	6.04	1.93	12.67	14.60
	Sept. 1941.....	3.00	.61	2.15	.39	6.15	2.01	11.84	13.85
	Oct. 1940.....	1.38	.37	2.45	.16	4.36	2.15	5.71	7.86
Silk and rayon goods.....	Oct. 1941.....	3.22	.23	1.89	.34	5.68	1.75	2.80	4.55
	Sept. 1941.....	3.39	.17	3.11	.07	6.74	1.21	3.00	4.21
	Oct. 1940.....	1.96	.09	4.15	.08	6.28	2.40	2.87	5.27
Slaughtering and meat pack- ing.	Oct. 1941.....	1.86	.28	6.33	.56	9.04	4.39	6.00	10.39
	Sept. 1941.....	2.24	.29	4.28	.39	7.20	3.71	3.88	7.59
	Oct. 1940.....	.84	.16	4.34	.18	5.52	5.37	4.32	9.69
Steam and hot water heating apparatus.	Oct. 1941.....	2.41	.29	.70	.40	3.80	.30	3.25	3.55
	Sept. 1941.....	3.23	.32	.77	.28	4.60	1.49	4.88	6.37
	Oct. 1940.....	1.44	.29	.25	.14	2.12	.51	8.03	8.54
Structural and ornamental metal work.	Oct. 1941.....	1.90	.21	1.06	.48	3.65	.34	2.33	2.67
	Sept. 1941.....	2.35	.24	.60	.19	3.38	.41	4.09	4.50
	Oct. 1940.....	1.60	.12	2.51	.14	4.37	1.80	5.81	7.61
Tools (not including edge tools, machine tools, files, and saws.	Oct. 1941.....	2.26	.13	.39	.26	3.04	.22	3.93	4.15
	Sept. 1941.....	2.95	.17	.21	.07	3.50	.51	4.84	5.35
	Oct. 1940.....	1.07	.23	.26	.23	1.79	.47	5.79	6.26
Woolen and worsted goods....	Oct. 1941.....	2.59	.29	.94	.22	4.04	1.07	3.43	4.50
	Sept. 1941.....	2.99	.24	1.35	.27	4.85	1.13	3.41	4.54
	Oct. 1940.....	2.40	.16	1.11	.10	3.77	2.21	5.41	7.62

¹ No individual industry data shown unless reports cover at least 25 percent of industrial employment.² Beginning with September 1940, workers leaving to enter the Army or Navy are included in "miscellaneous separations."³ Including aero engines.

Building Operations

NEW DWELLING UNITS IN NONFARM AREAS, FIRST 9 MONTHS OF 1941

Summary

RESIDENTIAL buildings upon which construction was started in nonfarm areas during the first 9 months of 1941 were planned to contain accommodations for 493,000 families. This 9-month total represents a greater supply of new housing than was provided in any complete calendar year since 1929, with the exception of 1940. During the entire year 1940, 540,000 new nonfarm dwelling units were placed under construction. As compared with only the first 9 months of 1940, the current total represents a gain of 25 percent, the increase being entirely in the one-family category.

The permit valuation of the 493,000 new dwelling units is estimated at approximately \$1,752,000,000, exclusive of cost of land purchase and development. Defense housing projects account for \$213,000,000 of the total permit valuation and nondefense United States Housing Authority projects for an additional \$58,000,000. Since permit valuations generally understate costs of construction, it is estimated that these total values will involve construction expenditures of close to \$2,000,000,000.

Projects containing 82,203 units, or 17 percent of the nonfarm total, were financed with public funds during the first 9 months of 1941 as compared with 39,154, or 10 percent of the nonfarm total, during the comparable period of 1940. The current total of publicly financed developments includes 64,750 units designated for occupancy by families of defense workers and military personnel. The remaining 17,453 units were in nondefense slum-clearance projects. By the end of September 1941, the defense housing program had completed or under construction contract a total of 88,535 dwelling units, not including trailers, dormitories, or portable units.

Scope of Report

The "nonfarm area" of the United States consists of all urban and rural nonfarm places. The "urban" designation is applied to all incorporated places with populations greater than 2,500 and also to a

small group of towns especially classified as urban. Incorporated places smaller than 2,500 population, as well as unincorporated areas excluding farms, are included in the rural nonfarm group. The classifications used here and also the groupings of estimates by size of city are derived from the 1940 census.

The basis for estimates of new dwelling units presented here is the sample of building-permit reports submitted monthly to the Bureau of Labor Statistics by local authorities. When this survey began in 1920, only the larger cities reported. Since then, coverage has been steadily extended until it now includes more than 2,400 cities of 1,000 population or over. Within the last year more than 400 incorporated places with a population between 500 and 1,000 have been added to the reporting group. In addition to the sample of cities, since 1939 a small number of counties have submitted reports of building permits issued in their unincorporated areas.

Building permits are usually issued when construction work is about to start. Therefore, these estimates represent the aggregate dwelling-unit capacity planned for in buildings upon which construction was started in the period specified. No attempt is made to estimate the number of new units added by alteration of existing buildings or lost through demolitions.

New Dwellings, First 9 Months of 1941

Construction was started on approximately 493,000 new dwelling units in nonfarm areas during the first 9 months of 1941, an increase of 25 percent over the corresponding period of 1940. The aggregate of new units during the current 9-month period was greater than during any complete calendar year since 1929, with the exception of 1940. During the entire year 1940, 540,000 new homes were placed under construction in nonfarm areas. Preliminary estimates for the last quarter of 1941 indicate that the 1941 total of new units will reach approximately 615,000.

Although new dwelling-unit totals in cities of all size classifications, and in the rural nonfarm area as well, were well ahead of the corresponding 1940 figures, the largest gains were experienced in rural nonfarm areas and in smaller-sized cities. The gain during the first 9 months of 1941 over the same period of 1940 was 41 percent in rural nonfarm areas, 27 percent in urban places below 50,000 population, and 15 percent in urban places over 50,000 population. These trends were very greatly influenced by the location of publicly financed defense projects, as will be explained later in more detail.

Approximately 84 percent of the nonfarm total for the first 9 months of 1941 were one-family units; 5 percent, two-family; and 11 percent, apartment. This compares with a new dwelling-unit dis-

tribution during the first 9 months of 1940: 79 percent, one-family; 7 percent, two-family; and 14 percent, apartment. Changes in the percentage distribution of each unit type during 1941 reflect an increase of 32 percent in one-family dwelling units over 1940, while apartment units were about the same in number and two-family units somewhat fewer. Omitting the publicly financed homes from the current year totals has but slight effect upon the relative importance of each type.

Apartment and two-family units continued to show a heavier concentration in the larger cities. Although only 39 percent of all new nonfarm units during the first 9 months of 1941 were in cities of over 50,000 population, 79 percent of the apartments and 62 percent of all two-family units were being constructed in cities of this group. Table 1 presents in more detail, by population group and type of unit, the number of new dwelling units during the first 9 months of 1940 and 1941.

TABLE 1.—*New Dwelling Units in Nonfarm Areas, First 9 Months of 1940 and 1941, by Population Group and Type of Dwelling*

Area and population group (1940 Census)	All types		1-family		2-family ¹		Multifamily ²	
	First 9 months of—		First 9 months of—		First 9 months of—		First 9 months of—	
	1941	1940	1941	1940	1941	1940	1941	1940
All nonfarm areas	493,073	393,383	412,677	312,183	26,403	27,272	53,993	53,928
Percent of change, 1940 to 1941	+25.3	-----	+32.2	-----	-3.2	-----	+0.1	-----
Urban (cities)	353,367	294,039	280,231	219,778	22,581	23,577	50,555	50,684
500,000 and over	83,485	73,562	48,551	39,058	6,778	6,071	28,156	28,433
100,000 to 500,000	75,885	61,442	59,028	44,386	6,228	7,245	10,629	9,811
50,000 to 100,000	34,666	33,270	27,357	26,194	3,289	3,385	4,020	3,691
25,000 to 50,000	41,333	33,932	36,216	27,925	1,995	2,210	3,122	3,797
10,000 to 25,000	56,311	42,788	51,429	37,713	2,369	2,333	2,513	2,742
5,000 to 10,000	35,452	29,293	33,165	26,278	1,176	1,436	1,111	1,579
2,500 to 5,000	26,235	19,752	24,485	18,224	746	897	1,004	631
Rural nonfarm areas	139,706	99,344	132,446	92,405	3,822	3,695	3,438	3,244

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

All sections of the country, except the Mountain region, showed greater residential construction activity during the first 9 months of 1941 than during the same period of 1940. Failure of the Mountain States to show an increase over 1940 is probably due to lack of defense industry and military centers in this area. The East North Central and South Atlantic States made the largest gains in terms of number of new units, 23,000 and 22,000, respectively. The largest proportionate gain was registered in the New England States, where the number of new dwelling units was 60 percent above 1940 levels.

The total of new nonfarm units for the third quarter of 1941 was nearly 175,000, a drop of 8 percent from the second-quarter total of 190,000 units. This decrease was a return to normal seasonal tend-

encies, which have been somewhat upset in the past year by intense defense activity. Trends of new construction in only one area, the West South Central States, ran counter to the general decline. Shortages of materials and resulting governmental action to curtail non-defense building played some part in holding down third-quarter totals and will undoubtedly be more important during the last few months of 1941. The estimates for each geographic division for the second and third quarters of 1941 and the third quarter of 1940 are shown by type of dwelling in table 2.

TABLE 2.—*New Dwelling Units in Nonfarm Areas, Third Quarter of 1940, and Second and Third Quarters of 1941, by Geographic Division and Type of Dwelling*

Geographic division	All types			1-family			2-family ¹			Multifamily ²		
	Third quarter, 1941	Second quarter, 1941	Third quarter, 1940	Third quarter, 1941	Second quarter, 1941	Third quarter, 1940	Third quarter, 1941	Second quarter, 1941	Third quarter, 1940	Third quarter, 1941	Second quarter, 1941	Third quarter, 1940
All divisions.....	174,506	190,023	150,634	150,819	158,595	122,621	8,609	9,799	11,042	15,078	21,629	16,971
New England.....	9,832	10,997	7,949	9,351	7,883	6,377	243	711	574	228	2,403	998
Middle Atlantic.....	28,370	30,413	20,364	22,419	23,042	12,812	1,647	1,788	1,231	4,304	5,583	6,321
East North Central.....	35,475	37,808	30,154	33,145	34,122	26,686	1,401	1,381	2,652	929	2,305	816
West North Central.....	11,742	12,284	10,675	11,111	10,922	10,057	420	415	269	211	947	349
South Atlantic.....	31,781	33,387	29,344	25,209	26,344	21,569	1,715	1,731	2,232	4,857	5,312	5,543
East South Central.....	7,908	9,788	8,145	6,659	8,594	6,900	971	1,030	975	278	164	270
West South Central.....	15,983	14,515	13,240	12,967	13,086	10,906	976	1,044	1,923	2,040	385	411
Mountain.....	4,722	5,795	5,550	4,286	5,141	5,232	237	253	113	199	401	211
Pacific.....	28,693	35,036	25,207	25,662	29,461	22,082	999	1,446	1,073	2,032	4,129	2,052

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

New Housing, by Source of Funds

A total of 82,203 families will find accommodations in publicly financed projects for which construction contracts were awarded during the first 9 months of 1941. This number represents 17 percent of the nonfarm total and is more than double the total of publicly financed units during the comparable period of 1940. The importance which this publicly financed housing program has assumed is further shown by comparison with the total nonfarm volume during depression years. Thus, the number of publicly financed units placed under construction during the first 9 months of 1941 was greater than the entire nonfarm total for each of the years 1932, 1933, and 1934.

The publicly financed developments initiated during the first 9 months of 1941 include 64,750 units designated for occupancy by families of defense workers and military personnel. The remaining 17,453 units were in nondefense projects of the original USHA slum-clearance program. The defense-housing program was just getting started by September 1940, so that the 39,154 publicly financed units started during the first 9 months of 1940 include only 2,685 homes

designated for defense use. By the end of September 1941, the defense-housing program had completed or had under construction contract a total of 88,535 ¹ dwelling units. This total does not include trailers, dormitories, or portable units.

Funds assigned to the Federal Works Administrator under the Lanham Act were used in providing 60,041 of the new defense units during the first 9 months of 1941. The Administrator allocated 19,597 of these units for construction by the Public Buildings Administration, 19,508 by the United States Housing Authority, 14,165 by the Division of Defense Housing, 4,050 by the Mutual Ownership Division, and the remainder by miscellaneous agencies. Additional defense units were initiated by the Defense Housing Corporation (2,813 units) and by the USHA with funds transferred from slum clearance (1,234 units).

Location of Government-sponsored housing projects near defense centers in rural areas and small cities had an important effect upon the distribution of nonfarm units by population group. During the first 9 months of 1941, 23,414 units, or 29 percent of the publicly financed total, were in rural nonfarm areas; 29 percent, in urban places under 50,000 population; and 42 percent, in the larger cities. In contrast to this, during the same period of 1940, all publicly financed units were in urban areas, only one-seventh of them being in cities of under 50,000 population. Approximately 28 percent of all privately financed nonfarm dwelling units during the first 9 months of 1941 were in rural nonfarm areas, 33 percent in urban places of less than 50,000 population and 39 percent in larger cities. These relationships for privately financed units are approximately the same as during the first 9 months of 1940. The distribution of new dwelling units in each population group during the first 9 months of 1940 and 1941 is given in table 3.

TABLE 3.—*New Dwelling Units in Nonfarm Areas, First 9 Months of 1940 and 1941, by Population Group and Source of Funds*

Area and population group (1940 Census)	Total		Private funds		Public funds	
	First 9 months of—		First 9 months of—		First 9 months of—	
	1941	1940	1941	1940	1941	1940
All nonfarm areas	493,073	393,383	410,870	354,229	82,203	39,154
Percent of change, 1940 to 1941	+25.3		+16.0		+109.9	
Urban (cities)	353,367	294,039	294,578	254,885	58,789	39,154
500,000 and over	83,485	73,562	72,494	63,403	10,991	10,159
100,000 to 500,000	75,885	61,442	58,071	45,086	17,814	16,356
50,000 to 100,000	34,666	33,270	28,736	26,361	5,930	6,909
25,000 to 50,000	41,333	33,932	33,713	30,820	7,620	3,112
10,000 to 25,000	56,311	42,788	46,537	41,023	9,774	1,765
5,000 to 10,000	35,452	29,293	31,774	28,571	3,678	722
2,500 to 5,000	26,235	19,752	23,253	19,621	2,982	131
Rural nonfarm areas	139,706	99,344	116,292	99,344	23,414	0

¹ The omission here of projects outside continental United States and also differences in timing cause discrepancies between this total and those quoted in other sources.

The East North Central and Pacific States had the largest number of new privately financed ² dwelling units during the first 9 months of 1941, with the South Atlantic States third in order. During the corresponding period of 1940, the Pacific States ranked first. The South Atlantic States led all areas in number of publicly financed units during the current 9-month period, with 18,601 units. The Middle Atlantic States were second, with 17,176 units, of which 8,587 had been put under construction contract during the third quarter of 1941. The large number of new publicly financed units pushed the South Atlantic States to first rank for public and private units combined.

Although there was a decrease of 8 percent for privately financed units and 10 percent for publicly financed, from the second to the third quarter of 1941, both of these categories showed substantial gains during the last 3 months over the same period of 1940. The increase for privately financed units was 10 percent. The only areas failing to share in this gain were the West North Central and Mountain sections. Publicly financed units were 61 percent ahead of the third quarter of 1940, the major part of the gain resulting from new Middle Atlantic projects. Table 4 contains the geographic division estimates separately for privately and publicly financed units for the second and third quarters of 1941 and the third quarter of 1940.

TABLE 4.—*New Dwelling Units in Nonfarm Areas, Third Quarter of 1940 and Second and Third Quarters of 1941, by Geographic Division and Source of Funds*

Geographic division	Total			Private funds			Public funds		
	Third quarter, 1941	Second quarter, 1941	Third quarter, 1940	Third quarter, 1941	Second quarter, 1941	Third quarter, 1940	Third quarter, 1941	Second quarter, 1941	Third quarter, 1940
All divisions.....	174,506	190,023	150,634	145,996	158,295	132,896	28,510	31,728	17,738
New England.....	9,832	10,997	7,949	6,607	7,041	6,128	3,225	3,956	1,821
Middle Atlantic.....	28,370	30,413	20,364	19,783	23,109	17,581	8,587	7,304	2,783
East North Central.....	35,475	37,808	30,154	30,720	33,307	25,838	4,755	4,501	4,316
West North Central.....	11,742	12,284	10,675	10,337	10,727	10,675	1,405	1,557	0
South Atlantic.....	31,781	33,387	29,344	26,564	28,471	24,403	5,217	4,916	4,941
East South Central.....	7,908	9,788	8,145	6,910	7,876	6,536	998	1,912	1,609
West South Central.....	15,983	14,515	13,240	14,019	12,521	11,346	1,964	1,994	1,894
Mountain.....	4,722	5,795	5,556	4,438	5,373	5,182	284	422	374
Pacific.....	28,693	35,036	25,207	26,618	29,870	25,207	2,075	5,166	0

The aggregate permit valuation of the 493,000 new nonfarm dwelling units initiated from January of 1941 through September is estimated at \$1,752,000,000, an increase of 30 percent over the same period of 1940. Of this value, \$1,527,000,000, or 87 percent was for one-family dwellings; \$68,000,000, or 4 percent, for two-family units; and \$157,000,000, or 9 percent, for apartments. In-

² Houses financed with mortgages insured by the Federal Housing Administration are included in the totals of privately financed units.

cluded in the valuation of nonfarm residential construction are \$213,000,000 for publicly financed defense housing and \$58,000,000 for nondefense USHA projects.

In terms of actual costs of materials, labor, and overhead, construction of the 493,000 new dwelling units will involve expenditures of close to \$2,000,000,000 before completion. This arises from the fact that builders applying for permits generally understate costs.³ Values used for publicly financed construction are aggregates of construction contract awards which can be taken as approximately equivalent to construction costs.

The largest permit valuation of new residential construction during the first 9 months of 1941 was that of the East North Central States, \$411,000,000. The Middle Atlantic States total of \$319,000,000 was the second largest value, and included \$63,000,000 in contract awards for publicly financed projects. Other large permit valuations were recorded in the Pacific States, \$300,000,000, and in the South Atlantic, \$292,000,000. Permit valuation of new privately financed dwellings and contract award totals for publicly financed projects, during the first 9 months of 1941, are shown in table 5.

TABLE 5.—Permit Valuation of New Dwellings in Nonfarm Areas During First 9 Months of 1941, by Geographic Division and Source of Funds

Geographic division	Estimated permit valuation		
	Total	Private funds	Public funds ¹
All divisions.....	\$1,751,684,000	\$1,480,545,000	\$271,139,000
New England.....	114,126,000	76,012,000	38,114,000
Middle Atlantic.....	318,658,000	255,735,000	62,923,000
East North Central.....	411,254,000	372,953,000	38,301,000
West North Central.....	103,119,000	90,613,000	12,506,000
South Atlantic.....	291,747,000	235,466,000	56,281,000
East South Central.....	55,406,000	44,448,000	10,958,000
West South Central.....	114,667,000	98,278,000	16,389,000
Mountain.....	42,633,000	39,234,000	3,399,000
Pacific.....	300,074,000	267,806,000	32,268,000

¹ Contract values.

SUMMARY OF BUILDING CONSTRUCTION IN PRINCIPAL CITIES, NOVEMBER 1941⁴

NOVEMBER was the second consecutive month of 1941 in which permit valuations for building construction were lower than those for the corresponding month of last year. Total permit valuations decreased 23 percent over the 12-month interval. The loss was chiefly in new nonresidential construction which dropped 45 percent.

³ A preliminary study of the Bureau of Labor Statistics for 8 cities indicates that construction costs of one-family dwellings exceed permit valuation by 16.0 percent. See Monthly Labor Review for October 1939.

⁴ More detailed information by geographic divisions and individual cities is contained in a separate pamphlet entitled "Building Construction, November 1941," copies of which will be furnished upon request.

New residential construction decreased 6 percent, but permit valuations for additions and repairs to existing structures rose 1 percent.

Similarly, permit valuations for the current month were 24 percent below those for October 1941. Decreases were reported for all classes of construction over this period. The dollar volume of additions, alterations, and repairs decreased 36 percent; of new nonresidential construction, 26 percent; and of new residential construction, 18 percent.

Comparison of November 1941 With October 1941 and November 1940

The volume of building construction in 2,142 identical cities with populations of 1,000 and over which reported to the Bureau of Labor Statistics in November 1941, October 1941, and November 1940 is summarized in table 1.

TABLE 1.—*Summary of Building Construction for Which Permits Were Issued in 2,142 Identical Cities, November 1941*

Class of construction	Number of buildings			Permit valuation		
	November 1941	Percentage change from—		November 1941	Percentage change from—	
		October 1941	November 1940		October 1941	November 1940
All construction	59,028	-28.5	+2.5	\$169,718,280	-24.0	-22.9
New residential	18,851	-23.3	-8.1	91,172,050	-18.4	-5.6
New nonresidential	10,487	-34.1	-4.0	55,563,771	-26.4	-44.8
Additions, alterations, and repairs	29,690	-29.4	+13.5	22,982,459	-36.1	+1.1

The number of new dwelling units for which permits were issued and the permit valuation of such new housekeeping residential construction in the 2,142 cities in November 1941 are presented in table 2. Percentage changes between November 1941 and October 1941 and November 1940 are also shown.

TABLE 2.—*Number and Permit Valuation of New Dwelling Units in 2,142 Identical Cities, November 1941, by Source of Funds and Type of Building*

Source of funds and type of dwelling	Number of dwelling units			Permit valuation		
	November 1941	Percentage change from—		November 1941	Percentage change from—	
		October 1941	November 1940		October 1941	November 1940
All dwellings	24,932	-13.8	-5.9	\$90,668,071	-18.3	-4.7
Privately financed	21,526	-15.8	+4.2	78,674,105	-20.1	+2.0
1-family	15,295	-26.8	-3.8	60,237,879	-29.5	-6.0
2-family ¹	1,106	-41.2	-29.8	3,099,443	-39.7	-21.5
Multifamily ²	5,125	+83.0	+60.9	15,336,783	+95.5	+69.1
Publicly financed	3,406	+2.1	-41.8	11,993,966	-3.8	-33.6

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

Comparison of First 11 Months of 1940 and 1941

Cumulative totals of permit valuations reported in the first 11 months of 1940 and 1941 are compared in table 3.

TABLE 3.—Permit Valuation of Building Construction, First 11 Months of 1940 and 1941, by Class of Construction ¹

Class of construction	Permit valuation		
	First 11 months of—		Percentage change
	1941	1940	
All construction.....	\$2, 524, 214, 893	\$2, 305, 104, 047	+9. 5
New residential.....	1, 372, 162, 266	1, 183, 199, 779	+16. 0
New nonresidential.....	809, 331, 826	804, 118, 307	+ . 6
Additions, alterations, and repairs.....	342, 720, 801	317, 785, 961	+7. 8

¹ Based on reports from cities with a population of 1,000 and over, the cities being identical for any given month of both years.

The number and permit valuation of new dwelling units for which permits were issued in the first 11 months of 1941 are compared with similar data for the like period of 1940 in table 4.

TABLE 4.—Number and Permit Valuation of New Dwelling Units, First 11 Months of 1940 and 1941, by Source of Funds and Type of Dwelling ¹

Source of funds and type of dwelling	Number of dwelling units			Permit valuation		
	First 11 months of—		Percent- age change	First 11 months of—		Percent- age change
	1941	1940		1941	1940	
All dwellings.....	363, 853	324, 263	+12. 2	\$1, 358, 019, 570	\$1, 163, 631, 202	+16. 7
Privately financed.....	306, 067	271, 948	+12. 5	1, 164, 003, 068	1, 002, 144, 080	+16. 2
1-family.....	235, 729	209, 223	+12. 7	967, 223, 620	825, 911, 552	+17. 1
2-family ²	20, 317	16, 950	+19. 9	53, 651, 828	42, 848, 530	+25. 2
Multifamily ³	50, 021	45, 775	+9. 3	143, 127, 620	133, 383, 998	+7. 3
Publicly financed.....	57, 786	52, 315	+10. 5	194, 016, 502	161, 487, 122	+20. 1

¹ Based on reports from cities with a population of 1,000 and over, the cities being identical for any given month of both years.

² Includes 1- and 2-family dwellings with stores.

³ Includes multifamily dwellings with stores.

Coverage of Building Permit Statistics

Building-permit data are collected by the Bureau of Labor Statistics directly from local building officials except in the States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, where State departments of labor collect and forward the data to the Bureau. Reports are obtained each month from more than 2,000 places having a population of 1,000 or more in 1940, from which are selected those for cities which also reported in the preceding month and in the corresponding month of the previous year. The resulting

tabulations of identical cities cover practically all cities with a population of 50,000 or more; the completeness of the coverage of cities in the remaining population groups decreases with the size of city.

In addition, the Bureau receives notifications of the value of construction contracts awarded by Federal and State governments. Federal and State building construction in the 2,142 reporting cities totaled \$36,180,000 in November 1941, as contrasted with \$35,628,000 in the previous month and \$76,346,000 in November 1940.

The permit-valuation figures represent estimates of construction costs made by prospective builders when applying for permits to build, in the case of privately financed construction, and the value of contracts awarded, in the case of construction financed with Federal or State funds. No land costs are included. Only building construction within the corporate limits of the reporting cities is included in the tabulations.

Construction from Public Funds, November 1941

The value of contracts awarded and force-account work started during November 1941, October 1941, and November 1940 on all construction projects financed wholly or partially from Federal funds is shown in table 5. This table includes other types of construction as well as building construction, both inside and outside the 2,142 reporting cities.

TABLE 5.—*Value of Contracts Awarded and Force-Account Work Started on Construction Projects Financed From Federal Funds, October and November 1941 and November 1940¹*

Federal agency	Contracts awarded and force-account work started		
	November 1941	October 1941 ²	November 1940 ²
Total.....	\$154, 177, 354	\$250, 691, 179	\$319, 632, 602
Public Works Administration:			
Federal.....	0	0	203, 799
Non-Federal:			
N. I. R. A.....	0	0	0
E. R. A. A.....	0	0	3, 578, 382
P. W. A. A., 1938.....	0	0	446, 621
Federal agency projects under the WPA.....	382, 755	0	108, 938
Regular Federal appropriations.....	144, 508, 856	242, 534, 802	301, 443, 261
United States Housing Authority.....	9, 285, 743	8, 156, 377	13, 851, 601

¹ Preliminary, subject to revision.

² Revised.

The value of all contracts awarded for public buildings and highway construction to be financed wholly from State funds, as reported by the State governments for November 1941, October 1941, and November 1940, was as follows:

	Public buildings	Highway construction
November 1941.....	\$1, 712, 982	\$8, 788, 661
October 1941.....	1, 329, 155	13, 911, 461
November 1940.....	1, 858, 398	5, 857, 365

Retail Prices

FOOD PRICES IN NOVEMBER 1941

RETAIL food costs advanced 1.3 percent between October 14 and November 18, continuing the rise which began in November 1940. Costs of all important groups of food advanced during the month except those of cereals, bakery products, and meats.

The largest advances were reported for eggs and fresh fruits and vegetables such as apples, bananas, carrots, and green beans, which generally rise seasonally during the late fall and early winter. Relatively short market supplies were reflected in contraseasonal price increases for oranges, potatoes, spinach, and onions. Other staple commodities showing substantial price gains were fresh milk, coffee, and fresh fish. The average cost of cereals and bakery products remained unchanged. Meat prices declined considerably, as is usual for this time of year when beef and pork are marketed in large quantities.

Preliminary reports on 18 foods in 19 cities as of December 2 indicated further declines in prices of meats, lard, and butter, and a reduction in prices of eggs, with continued advances in other food prices. No reports are yet available on changes in food prices since the entry of the United States into the war.

On November 18, the latest date for which the Bureau secured retail food costs prior to the entrance of the United States in the war, the index was 113.1 percent of the 1935-39 average—the highest level reached in nearly 11 years. Since August 1939, just prior to the outbreak of the European War, total retail food costs have risen 21 percent, with the most outstanding increases reported for eggs (61 percent), fresh and canned fish (36 percent), dairy products (30 percent), dried fruits and vegetables (29 percent), and fats and oils (26 percent).

Since November 1940 retail food prices have been advancing continuously. The net increase in total food costs for the year was 17.9 percent, with advances amounting to 30 percent for pork, 34 percent for fresh vegetables, and 25 percent for fresh fruit. The foods showing the largest price increases during the period are lard (63 percent), shortening in cartons (55 percent), and cheese, coffee, evaporated milk, eggs, canned pink salmon, canned peaches, navy

beans, shortening in tin or similar containers, and oleomargarine (24 to 31 percent).

Between October 14 and November 18, advances in retail prices of milk ranging from one-half cent to about 2½ cents per quart occurred in 11 cities, and moderate increases in prices of white bread were reported from 15 cities. At the same time, average bread prices declined 0.8 cent per pound in Chicago, 0.3 cent in Dallas, and 0.1 cent in Pittsburgh. Since last April increases in milk prices have been reported in 46 of the 51 cities covered by the Bureau's survey, while bread prices on November 18 were higher than on July 15 in 45 of those cities. Increases in prices of bread and milk have been attributed to increased costs of production; flour prices at wholesale advanced 23.5 percent between November 1940 and November 1941.

All of the 11 cuts of meat priced by the Bureau declined in price between mid-October and mid-November, offsetting to a considerable extent the price increases reported for 30 other foods of the 54 included in the Bureau's index. Lard prices also were reduced about 4 percent following the recent heavy marketing of hogs. Butter prices declined again in an irregular movement, as a result of increases in supplies. Only two other commodities, lettuce and sweetpotatoes, were lower in price on November 18 than on October 14. All of the 54 foods were higher in price on November 18 than a year earlier.

TABLE 1.—*Indexes of Retail Costs of Food in 51 Large Cities Combined,¹ by Commodity Groups, November, October, and September 1941, November 1940, August 1939, and November 1929*

[1935-39=100]

Commodity group	1941			1940	1939	1929
	Nov. 18 ²	Oct. 14	Sept. 16	Nov. 12	Aug. 15	Nov. 15
All foods.....	113.1	111.6	110.7	95.9	93.5	135.2
Cereals and bakery products.....	102.2	102.2	100.9	94.7	93.4	107.6
Meats.....	110.4	112.9	115.5	97.3	95.7	124.6
Beef and veal.....	112.4	115.1	116.2	107.4	99.6	(³)
Pork.....	105.4	109.3	114.9	81.3	88.0	(³)
Lamb.....	107.4	110.8	116.3	94.9	98.8	(³)
Chickens.....	99.4	101.6	103.1	91.1	94.6	(³)
Fish, fresh and canned.....	135.9	131.5	129.9	112.1	99.6	(³)
Dairy products.....	120.9	119.9	118.5	103.0	93.1	129.8
Eggs.....	146.0	137.3	132.9	115.2	90.7	184.1
Fruits and vegetables.....	110.2	104.0	100.5	87.3	92.4	178.4
Fresh.....	111.1	103.5	99.4	85.5	92.8	184.4
Canned.....	105.2	103.7	102.5	91.3	91.6	121.9
Dried.....	116.2	112.7	111.0	100.1	90.3	178.9
Beverages.....	112.9	111.0	109.2	90.3	94.9	163.1
Fats and oils.....	106.7	105.6	103.0	80.2	84.5	125.3
Sugar.....	112.9	112.5	111.8	94.8	95.6	116.8

¹ Aggregate costs of 54 foods in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined with the use of population weights.

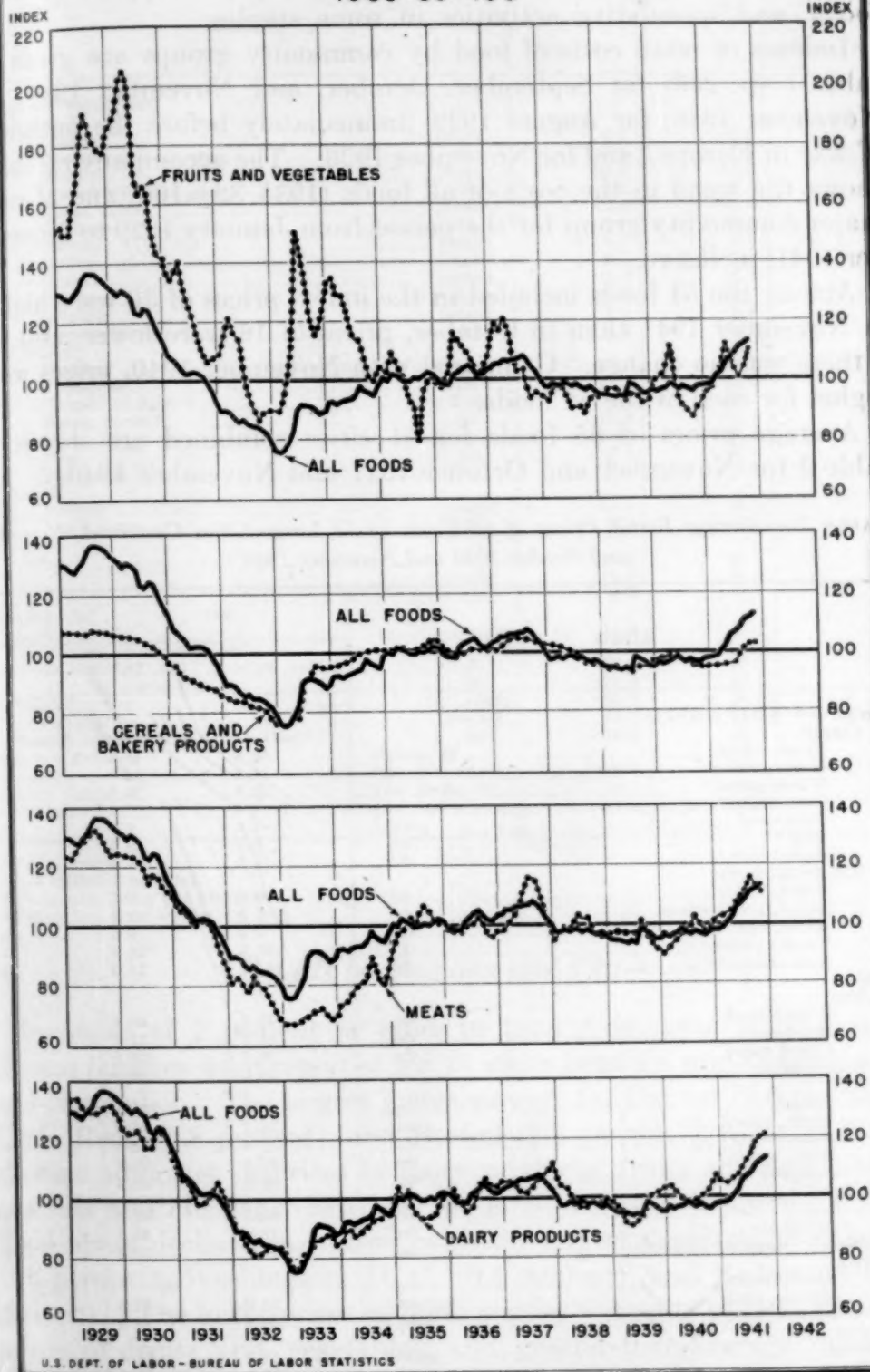
² Preliminary.

³ Not available.

The continuous upward trend in retail prices of food for the past 12 months has followed marked advances in wholesale markets,

RETAIL COST OF FOOD

1935-39 = 100



resulting from Government policies with regard to purchases under the Lend-Lease Act, and loans on basic farm commodities, together with increased consumer demand, slightly smaller supplies of some foods, and speculative activities in some staples.

Indexes of retail costs of food by commodity groups are given in table 1 (p. 236) for September, October, and November 1941, for November 1940, for August 1939 (immediately before the outbreak of war in Europe), and for November 1929. The accompanying chart shows the trend in the costs of all foods (1935-39=100) and of each major commodity group for the period from January 1929 to November 1941, inclusive.

Among the 54 foods included in the index, prices of 30 were higher in November 1941 than in October, prices of 16 were lower, and for 8 there was no change. Compared with November 1940, prices were higher for each of the 54 foods.

Average prices of 65 foods for 51 cities combined are shown in table 2 for November and October 1941 and November 1940.

TABLE 2.—Average Retail Prices of 65 Foods in 51 Large Cities Combined, November and October 1941 and November 1940

Article	1941		1940
	Nov. 18 ¹	Oct. 14	Nov. 12
Cereals and bakery products:			
Cereals:	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Flour, wheat.....10 pounds	48.5	48.3	40.8
Macaroni.....pound	14.0	14.0	13.8
Wheat cereal ².....28-oz. pkg	23.8	23.6	23.6
Corn flakes.....8-oz. pkg	7.1	7.1	7.0
Corn meal.....pound	4.4	4.4	4.2
Rice ³.....do	9.1	9.1	7.9
Rolled oats ².....do	7.5	7.4	7.1
Bakery products:			
Bread, white.....do	8.6	8.7	7.8
Bread, whole-wheat.....do	9.5	9.4	8.8
Bread, rye.....do	9.6	9.6	9.1
Vanilla cookies.....do	25.8	25.8	25.1
Soda crackers.....do	15.2	15.2	15.0
Meats:			
Beef:			
Round steak.....do	39.3	40.4	37.7
Rib roast.....do	31.1	31.8	31.0
Chuck roast.....do	26.5	26.9	25.1
Veal: Cutlets.....do	49.0	50.1	43.8
Pork:			
Chops.....do	36.0	38.1	27.9
Bacon, sliced.....do	36.3	36.9	28.5
Ham, sliced ².....do	52.4	53.6	43.7
Ham, whole.....do	32.0	32.8	24.2
Salt pork.....do	20.0	20.4	16.4
Lamb:			
Leg.....do	30.5	31.2	26.9
Rib chops.....do	37.8	39.1	33.5
Poultry: Roasting chickens.....do	31.7	32.4	29.2
Fish:			
Fresh, frozen.....do	(²)	(²)	(²)
Salmon, pink.....16-oz. can	20.0	19.9	15.7
Salmon, red ².....do	36.3	35.3	26.1
Dairy products:			
Butter.....pound	43.3	43.4	37.4
Cheese.....do	34.2	33.8	26.1
Milk, fresh (delivered).....quart	14.7	14.5	12.8
Milk, fresh (store).....do	13.6	13.4	11.7
Milk, fresh (delivered and store) ³.....do	14.3	14.1	12.4
Milk, evaporated.....14½-oz. can	8.7	8.7	7.0
Eggs.....dozen	51.9	48.7	40.7

See footnotes at end of table.

TABLE 2.—Average Retail Prices of 65 Foods in 51 Large Cities Combined, November and October 1941 and November 1940—Continued

Article	1941		1940
	Nov. 18 ¹	Oct. 14	Nov. 12
Fruits and vegetables:			
Fresh:			
	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Apples.....pound	5.3	4.9	4.7
Bananas.....do	8.0	7.5	6.6
Oranges.....dozen	38.1	37.5	28.4
Grapefruit ².....each	5.5	8.5	(⁴)
Beans, green.....pound	15.4	11.9	7.8
Cabbage.....do	3.5	3.5	2.5
Carrots.....bunch	6.7	5.7	5.2
Lettuce.....head	8.7	9.4	8.0
Onions.....pound	4.6	4.1	3.3
Potatoes.....15 pounds	39.1	34.5	28.1
Spinach.....pound	7.9	6.8	5.5
Sweetpotatoes.....do	4.2	4.3	3.9
Canned:			
Peaches.....No. 2½ can	21.4	21.2	16.6
Pineapple.....do	22.2	22.0	20.9
Grapefruit juice ².....No. 2 can	9.5	9.5	(⁴)
Beans, green ².....do	11.9	11.4	10.0
Corn.....do	12.0	11.9	10.6
Peas.....do	14.2	13.9	13.3
Tomatoes.....do	9.9	9.7	8.4
Dried:			
Prunes.....pound	10.5	10.1	9.7
Navy beans.....do	8.3	8.1	6.5
Beverages:			
Coffee.....do	26.6	26.1	20.5
Tea.....¼ pound	19.5	19.3	17.6
Cocoa ².....8-oz. can	9.1	9.1	9.1
Fats and oils:			
Lard.....pound	14.8	15.4	9.1
Shortening, other than lard:			
In cartons.....do	17.7	17.4	11.4
In other containers.....do	23.3	22.6	18.4
Salad dressing.....pint	23.7	23.0	20.2
Oleomargarine.....pound	19.5	18.5	15.7
Peanut butter.....do	19.6	19.3	17.8
Sugar and sweets:			
Sugar.....10 pounds	60.6	60.4	51.0
Corn sirup ².....24-oz. can	14.1	14.1	13.6
Molasses ².....18-oz. can	13.5	13.5	13.5

¹ Preliminary.² Not included in index.³ Composite prices not computed.⁴ Priced first time on Oct. 14, 1941.

Details by Regions and Cities

Increases of 2 percent or more in total food costs to moderate-income families were reported for 11 cities between mid-October and mid-November. The largest increases were for Denver (3.0 percent), Little Rock (2.8 percent), and Boston (2.8 percent). Greater-than-average advances in prices of dairy products, fruits and vegetables, and fats and oils contributed to the large increases in these 3 cities. Food prices declined in 6 cities, with the largest decreases in Atlanta (1.0 percent), Washington, D. C. (0.4 percent), and Richmond (0.4 percent). The lower prices in these 3 cities were due to reductions in prices of fruits and vegetables, and greater-than-average declines in prices of meats.

Indexes of food costs by cities are presented in table 3 for November and October 1941, and November 1940.

TABLE 3.—Indexes of the Average Retail Cost of All Foods, by Cities, November and October 1941 and November 1940

[1935-39=100]

Region and city	1941		1940	Region and city	1941		1940
	Nov. 18 ¹	Oct. 14	Nov. 12		Nov. 18 ¹	Oct. 14	Nov. 12
United States.....	113.1	111.6	95.9	South Atlantic:			
New England:				Atlanta.....	111.1	112.2	93.4
Boston.....	111.5	108.5	93.5	Baltimore.....	114.3	113.6	95.3
Bridgeport.....	111.5	⁴ 109.9	95.3	Charleston, S. C.....	113.1	⁴ 112.6	95.1
Fall River.....	111.7	110.1	96.3	Jacksonville.....	119.3	⁴ 117.5	97.5
Manchester.....	112.9	110.9	96.2	Norfolk ³	116.7	115.2	94.7
New Haven.....	110.5	108.3	94.4	Richmond.....	111.8	112.3	93.4
Portland, Maine.....	111.2	109.3	⁴ 95.4	Savannah.....	118.6	118.3	98.5
Providence.....	112.1	110.9	96.2	Washington, D. C.....	111.4	111.9	93.9
Middle Atlantic:				East South Central:			
Buffalo.....	115.2	114.4	97.4	Birmingham.....	112.6	109.7	⁴ 94.3
Newark.....	111.9	111.2	97.1	Louisville.....	114.1	111.6	94.3
New York.....	113.1	111.4	97.4	Memphis.....	112.3	111.3	92.0
Philadelphia.....	108.7	109.0	93.6	Mobile.....	120.2	118.9	⁴ 95.3
Pittsburgh.....	112.9	111.8	96.3	West South Central:			
Rochester.....	112.1	111.1	98.3	Dallas.....	111.7	⁴ 110.0	92.1
Scranton.....	109.5	109.8	97.1	Houston.....	118.6	116.6	101.3
East North Central:				Little Rock.....	114.4	111.3	93.5
Chicago.....	114.8	113.5	95.9	New Orleans.....	118.7	118.8	98.7
Cincinnati.....	114.3	112.6	94.5	Mountain:			
Cleveland.....	116.4	114.0	96.7	Butte.....	110.9	109.6	96.3
Columbus, Ohio.....	110.4	109.2	91.4	Denver.....	113.2	109.9	92.9
Detroit.....	112.0	111.1	94.8	Salt Lake City.....	115.7	113.9	98.3
Indianapolis.....	114.9	112.6	96.5	Pacific:			
Milwaukee.....	111.3	109.2	94.3	Los Angeles.....	115.4	112.4	98.8
Peoria.....	116.1	114.7	97.6	Portland, Ore.....	121.7	120.3	99.9
Springfield, Ill.....	115.7	112.8	94.9	San Francisco.....	114.4	112.6	97.8
West North Central:				Seattle.....	118.9	118.1	99.2
Kansas City.....	108.2	107.1	91.6				
Minneapolis.....	112.9	112.5	97.5				
Omaha.....	109.4	108.0	96.9				
St. Louis.....	117.0	114.6	96.3				
St. Paul.....	111.4	109.3	96.9				

¹ Aggregate costs of 54 foods in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined for the United States with the use of population weights. Primary use is for time-to-time comparisons rather than place-to-place comparisons.

² Preliminary.

³ Includes Portsmouth and Newport News.

⁴ Revised.

Average Annual Indexes, 1913 to 1940

In order to make it possible to compare current trends in retail food costs with trends for earlier years, including the first World War period, average annual indexes of retail food costs for the years 1913 to 1940, inclusive, and average monthly indexes for January 1940 to November 1941, inclusive, are shown in table 4.

TABLE 4.—Indexes of All Retail Food Costs in 51 Large Cities Combined, by Years From 1913 to 1940, and by Months, January 1940 to November 1941

[1935-39=100]

Year	All-foods index	Year	All-foods index	Year and month	All-foods index	Year and month	All-foods index
				1940		1941	
1913.....	79.9	1927.....	132.3	January.....	94.8	January.....	97.8
1914.....	81.8	1928.....	130.8	February.....	96.6	February.....	97.9
1915.....	80.9	1929.....	132.5	March.....	95.6	March.....	98.4
1916.....	90.8	1930.....	126.0	April.....	96.2	April.....	100.6
1917.....	116.9	1931.....	103.9	May.....	97.0	May.....	102.1
1918.....	134.4	1932.....	86.5	June.....	98.3	June.....	105.9
1919.....	149.8	1933.....	84.1	July.....	97.4	July.....	106.7
1920.....	168.8	1934.....	93.7	August.....	96.2	August.....	108.0
1921.....	128.3	1935.....	100.4	September.....	97.2	September.....	110.7
1922.....	119.9	1936.....	101.3	October.....	96.2	October.....	111.6
1923.....	124.0	1937.....	105.3	November.....	95.9	November.....	113.1
1924.....	122.8	1938.....	97.8	December.....	97.3	December.....	
1925.....	132.9	1939.....	95.2				
1926.....	137.4	1940.....	96.6				

Wholesale Prices

WHOLESALE PRICES IN NOVEMBER 1941 ¹

WITH a slight advance of 0.1 percent in November, commodity prices in wholesale markets were at the highest level since January 1930. Except for a minor reaction in February the upward movement has been steady throughout the year, and prices in November were more than 16 percent higher than they were a year ago. The advance brought the Bureau of Labor Statistics' comprehensive index of nearly 900 price series to 92.5 percent of the 1926 average.

The price rise during the month, though moderate, was quite broad, as each of the 10 commodity groups except fuel and lighting materials share in the advance. The greatest increase, 1.3 percent, occurred in hides and leather products. Housefurnishing goods and miscellaneous commodities rose about 1 percent; farm products, 0.7 percent; foods, 0.4 percent; textile products, metals and metal products, and building materials, 0.2 percent; and chemicals and allied products, 0.1 percent. Fuel and lighting materials declined 1 percent.

Average wholesale prices for raw materials rose 0.6 percent during the month, while semimanufactured and fully manufactured products declined fractionally.

Prices for commodities in wholesale markets were considerably higher than they were a year ago. The most outstanding increase, almost 33 percent, was in agricultural commodities, with grains 24 percent higher and livestock 29 percent higher. Sharp increases also occurred in prices for cotton and wool and for fruits and vegetables. Average wholesale prices of foods were 23 percent higher in November 1941 than in November 1940. In addition to increases of 19 percent for meats, 17 percent for dairy products, and nearly 15 percent for cereal products, prices of edible fats and oils and of imported foods, such as coffee, cocoa, tea, and pepper, advanced sharply. Led by an increase of 43 percent for cotton goods, the index for textile products rose 22 percent in the past year. Marked advances also occurred in prices of burlap and imported fibers. Since November 1940, chemicals and allied products advanced nearly 16 percent, largely because of pronounced increases in prices for industrial fats and oils and for certain imported drugs. Housefurnishing goods increased 13.5 per-

¹ More detailed information on wholesale prices is given in the Wholesale Price pamphlet and will be furnished upon request.

cent; miscellaneous commodities, 12.6 percent; and hides and leather products, 11.5 percent. Average prices for metals and metal products, some of which were placed under Government regulation shortly after war broke out in Europe, advanced less than 6 percent. Building material prices were 8.7 percent and fuel and lighting materials 9.6 percent higher than for November of last year.

Following their sharp decline in October, prices of agricultural commodities resumed their uptrend and rose 0.7 percent in November. Grain prices averaged 3.6 percent higher in November than in October, with increases of 14 percent reported for barley, 8 percent for oats, 3 percent for corn, and 2 percent for wheat. Rye, on the other hand, declined nearly 7 percent. Quotations were also higher for eggs, fresh milk, hay, hops, seeds, tobacco, and for apples, potatoes, onions, and beans. There were seasonal declines in average prices for livestock and poultry of over 4 percent. Quotations for calves were down 10 percent; steers and cows, about 4 percent; hogs, 3.5 percent; and poultry, from 5 to 7 percent. Prices were also lower for cotton and for citrus fruits.

Average prices for foodstuffs in wholesale markets rose slightly in November. Fruits and vegetables were up 2.8 percent, with higher prices reported for most canned and dried fruits, canned and fresh vegetables, rice, corn meal, oatmeal, and for condensed and powdered milk, butter, cured pork, cocoa beans, coffee, canned and cured fish, lard, oleo oil, peanut butter, and tea. Meats dropped 3 percent, led by a decline of 7 percent for veal. Prices were also lower for fresh beef and pork, lamb, bacon, ham, and dressed poultry, and quotations for most edible vegetable oils declined.

Reflecting earlier increases in prices for hides and leather, luggage advanced 3 percent and shoes rose 1.4 percent. Goatskins, sheepskins, chrome calf, and sole leather also averaged higher.

Wholesale prices of textile products rose 0.2 percent in November to the highest level since the spring of 1929. Higher prices were reported for work shirts, hosiery and underwear, overcoating, hemp, jute, cordage, and artificial leather. Although cotton goods prices rose 0.2 percent on the average to a level more than 39 percent higher than at the beginning of the year, the price movement was mixed during November. Denim, duck, percale, print cloth, sheeting, and shirting advanced, while drills, osnaburg, tire fabric, and carded yarns declined.

Weakening prices for fuel oil and gasoline from the Pennsylvania fields and for gasoline from the California fields caused the fuel and lighting materials group index to drop 1 percent to the lowest level since July. Prices were fractionally higher for bituminous coal in some areas, and for kerosene and natural gasoline.

A general advance in prices for farm machinery, together with increases for builders' hardware, certain plumbing items, and for quicksilver, pig zinc, and zinc sheets caused the metals and metal products group index to rise 0.2 percent to the highest point in more than 16 years.

In November average wholesale prices of building materials advanced to a new peak in the past 18 years. Increased prices for cement, asphalt, lime, sand, gravel, millwork, and for certain types of lumber accounted for the advance. The lumber index dropped 0.6 percent as a result of lower prices for oak, yellow pine, Ponderosa pine, spruce, and red cedar shingles.

Because of higher prices for mixed fertilizers, fish scrap, imported oils, copper sulphate, and strychnine, there was a slight advance in the chemicals and allied products group index. Quotations for glycerine, carbon bisulphide, ground bones, copra, soybean oil, and tallow declined sharply.

Wholesale prices for housefurnishing goods advanced 1.1 percent to a 15-year peak. In addition to higher prices for most types of furniture, sewing machines, blankets, and oil cloth also advanced.

Cattle feed prices rose 6.9 percent in November after declining sharply in October. Prices for boxboard, cooperage, soap, and automobile tires and tubes continued to advance.

Index numbers for the groups and subgroups of commodities for October and November 1941 and November 1940 and the percentage changes from October 1941 and November 1940 are shown in table 1.

TABLE 1.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities, November 1941 with Comparisons for October 1941 and November 1940

[1926=100]

Group and subgroup	November 1941	October 1941	Change from a month ago	November 1940	Change from a year ago
			Percent		Percent
All commodities	92.5	92.4	+0.1	79.6	+16.2
Farm products	90.6	90.0	+ .7	68.2	+32.8
Grains.....	84.3	81.4	+3.6	67.7	+24.5
Livestock and poultry.....	90.6	94.5	-4.1	69.9	+29.6
Other farm products.....	91.7	88.9	+3.1	66.8	+37.3
Foods	89.3	88.9	+ .4	72.5	+23.2
Dairy products.....	96.3	95.2	+1.2	82.3	+17.0
Cereal products.....	85.9	86.4	- .6	74.8	+14.8
Fruits and vegetables.....	77.9	75.8	+2.8	60.4	+29.0
Meats.....	90.8	93.6	-3.0	76.2	+19.2
Other foods.....	89.0	85.8	+3.7	65.4	+36.1
Hides and leather products	114.1	112.6	+1.3	102.3	+11.5
Shoes.....	120.5	118.8	+1.4	107.1	+12.5
Hides and skins.....	114.0	113.1	+ .8	101.2	+12.6
Leather.....	101.1	100.9	+ .2	93.2	+8.5
Other leather products.....	111.5	106.8	+4.4	99.7	+11.8

TABLE 1.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities, November 1941 with Comparisons for October 1941 and November 1940—Continued

[1926=100]

Group and subgroup	November 1941	October 1941	Change from a month ago	November 1940	Change from a year ago
			Percent		Percent
Textile products	91.1	90.9	+0.2	74.5	+22.3
Clothing.....	97.9	97.8	+1	85.7	+14.2
Cotton goods.....	105.4	105.2	+2	73.6	+43.2
Hosiery and underwear.....	67.0	66.6	+6	61.5	+8.9
Rayon.....	30.3	30.3	0	29.5	+2.7
Silk.....				42.8	
Woolen and worsted goods.....	102.6	102.3	+3	88.8	+15.5
Other textile products.....	96.0	95.6	+4	73.7	+30.3
Fuel and lighting materials	78.8	79.6	-1.0	71.9	+9.6
Anthracite.....	85.3	85.3	0	80.7	+5.7
Bituminous coal.....	108.2	108.1	+1	100.4	+7.8
Coke.....	122.2	122.2	0	112.6	+8.5
Electricity.....	(1)	(1)		73.3	
Gas.....	(1)	78.9		80.5	
Petroleum and products.....	60.4	61.7	-2.1	49.3	+22.5
Metals and metal products	103.3	103.1	+2	97.6	+5.8
Agricultural implements.....	96.3	93.8	+2.7	92.6	+4.0
Farm machinery.....	97.4	94.8	+2.7	93.8	+3.8
Iron and steel.....	97.1	97.0	+1	95.3	+1.9
Motor vehicles.....	112.3	112.3	0	100.3	+12.0
Nonferrous metals.....	84.8	84.6	+2	83.9	+1.1
Plumbing and heating.....	87.9	87.8	+1	80.5	+9.2
Building materials	107.5	107.3	+2	98.9	+8.7
Brick and tile.....	96.6	96.6	0	90.2	+7.1
Cement.....	93.1	92.7	+4	90.8	+2.5
Lumber.....	128.7	129.5	-6	117.5	+9.5
Paint and paint materials.....	95.3	96.0	-7	85.7	+11.2
Plumbing and heating.....	87.9	87.8	+1	80.5	+9.2
Structural steel.....	107.3	107.3	0	107.3	0
Other building materials.....	103.2	101.5	+1.7	94.2	+9.6
Chemicals and allied products	89.8	89.7	+1	77.5	+15.9
Chemicals.....	88.3	88.4	-1	85.1	+3.8
Drugs and pharmaceuticals.....	123.2	124.1	-7	95.9	+28.5
Fertilizer materials.....	77.3	77.3	0	69.9	+10.6
Mixed fertilizers.....	79.6	77.5	+2.7	74.2	+7.3
Oils and fats.....	92.9	93.4	-5	42.3	+119.6
Housefurnishing goods	100.6	99.5	+1.1	88.6	+13.5
Furnishings.....	105.2	104.4	+8	95.0	+10.7
Furniture.....	95.8	94.4	+1.5	81.8	+17.1
Miscellaneous	87.3	86.4	+1.0	77.5	+12.6
Automobile tires and tubes.....	67.4	65.5	+2.9	58.6	+15.0
Cattle feed.....	120.7	112.9	+6.9	92.1	+31.1
Paper and pulp.....	102.2	101.9	+3	93.1	+9.8
Rubber, crude.....	46.3	46.6	-6	42.9	+7.9
Other miscellaneous.....	92.2	92.1	+1	82.8	+11.4
Raw materials	90.2	89.7	+6	72.6	+24.2
Semimanufactured articles.....	89.7	89.9	-2	80.7	+11.2
Manufactured products	93.8	93.9	-1	82.6	+13.6
All commodities other than farm products.....	92.7	92.8	-1	81.9	+13.2
All commodities other than farm products and foods.....	93.5	93.4	+1	84.1	+11.2

¹ Data not yet available.

Index Numbers by Commodity Groups, 1926 to November 1941

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1940, inclusive, and by months from November 1940 to November 1941, inclusive, are shown in table 2.

TABLE 2.—*Index Numbers of Wholesale Prices by Groups of Commodities*

[1926 = 100]

Year and month	Farm products	Food	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous	All commodities
By years:											
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1929	104.9	90.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	95.3
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	64.8
1933	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.1	75.8	62.5	65.9
1936	80.9	82.1	95.4	71.5	76.2	87.0	86.7	78.7	81.7	70.5	80.8
1937	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8	86.3
1938	68.5	73.6	92.8	66.7	76.5	95.7	90.3	77.0	86.8	73.3	78.6
1939	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	77.1
1940	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	78.6
By months:											
1940:											
November	68.2	72.5	102.3	74.5	71.9	97.6	98.9	77.5	88.6	77.5	79.6
December	69.7	73.5	102.3	74.8	71.7	97.6	99.3	77.7	88.9	77.3	80.0
1941:											
January	71.6	73.7	102.4	75.2	72.1	97.7	99.6	78.6	89.0	77.1	80.8
February	70.3	73.5	101.6	76.4	72.1	97.6	99.3	78.5	89.1	76.9	80.6
March	71.6	75.2	102.6	78.4	72.0	97.7	99.5	79.8	89.5	77.2	81.5
April	74.4	77.9	103.9	81.0	72.9	97.9	100.1	81.8	90.4	78.6	83.2
May	76.4	79.5	106.4	83.0	75.6	98.1	100.4	83.6	91.4	79.6	84.9
June	82.1	83.1	107.8	84.5	77.9	98.3	101.0	83.8	93.1	80.6	87.1
July	85.8	84.7	109.4	86.2	78.5	98.5	103.1	85.2	94.4	82.0	88.8
August	87.4	87.2	110.2	88.3	79.0	98.6	105.5	86.0	95.4	83.7	90.3
September	91.0	89.5	111.3	89.7	79.2	98.6	106.4	87.4	97.2	85.1	91.8
October	90.0	88.9	112.6	90.9	79.6	103.1	107.3	89.7	99.5	86.4	92.4
November	90.6	89.3	114.1	91.1	78.8	103.3	107.5	89.8	100.6	87.3	92.5

The price trend for specified years and months since 1926 is shown in table 3 for the following groups of commodities: Raw materials, semimanufactured articles, manufactured products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Manufactured products" was given in Serial No. R. 1251—Wholesale Prices, December and Year 1940.

TABLE 3.—Index Numbers of Wholesale Prices by Special Groups of Commodities
[1926=100]

Year and month	Raw materials	Semi-manufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods	Year and month	Raw materials	Semi-manufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods
By years:						By months—Con. 1941:					
1926	100.0	100.0	100.0	100.0	100.0	January	74.6	81.3	83.5	82.7	84.3
1929	97.5	93.9	94.5	93.3	91.6	February	74.0	81.6	83.5	82.7	84.4
1932	55.1	59.3	70.3	68.3	70.2	March	75.3	83.4	84.2	83.6	84.9
1933	56.5	65.4	70.5	69.0	71.2	April	77.5	85.1	85.5	85.0	85.9
1936	79.9	75.9	82.0	80.7	79.6	May	79.7	86.4	87.1	86.6	87.4
1937	84.8	85.3	87.2	86.2	85.3	June	83.6	87.6	88.6	88.0	88.6
1938	72.0	75.4	82.2	80.6	81.7	July	86.1	87.9	90.1	89.3	89.7
1939	70.2	77.0	80.4	79.5	81.3	August	87.6	89.5	91.5	90.7	90.8
1940	71.9	79.1	81.6	80.8	83.0	September	90.0	90.3	92.8	91.9	91.6
By months:						October	89.7	89.9	93.9	92.8	93.4
1940:						November	90.2	89.7	93.8	92.7	93.5
November	72.6	80.7	82.6	81.9	84.1						
December	73.6	80.7	82.8	82.1	84.1						

Weekly Fluctuations

Weekly fluctuations in the major commodity group classifications during October and November are shown by the index numbers in table 4.

TABLE 4.—Weekly Index Numbers of Wholesale Prices by Commodity Groups, October and November 1941

[1926=100]

Commodity group	Nov. 29	Nov. 22	Nov. 15	Nov. 8	Nov. 1	Oct. 25	Oct. 18	Oct. 11	Oct. 4
All commodities	92.3	92.2	92.3	91.7	91.6	91.2	91.7	91.6	91.6
Farm products	91.1	90.3	90.7	89.6	89.5	88.1	89.8	90.5	90.3
Foods	89.2	89.5	89.6	88.8	88.2	87.5	88.4	89.2	89.7
Hides and leather products	115.4	114.9	114.1	114.1	114.1	113.2	113.2	112.6	112.4
Textile products	90.6	90.4	90.5	90.4	90.3	90.3	90.2	90.1	89.9
Fuel and lighting materials	79.4	79.4	79.6	79.7	79.9	79.9	80.0	79.9	80.1
Metals and metal products	103.3	103.4	103.4	102.2	102.2	102.2	102.2	98.6	98.7
Building materials	107.4	107.4	107.1	107.1	107.3	107.0	106.9	107.1	106.6
Chemicals and allied products	89.7	89.5	89.5	89.8	89.8	89.6	89.7	89.8	89.7
Housefurnishing goods	101.9	101.7	101.6	100.1	100.0	99.9	99.9	99.7	98.5
Miscellaneous	87.1	87.1	87.2	85.9	85.5	85.5	85.6	85.9	85.0
Raw materials	90.2	89.7	89.9	89.2	89.1	88.2	89.2	89.6	89.5
Semimanufactured articles	89.6	89.5	89.6	89.5	89.7	89.7	89.7	89.7	90.5
Manufactured products	93.9	94.0	94.1	93.5	93.4	93.1	93.5	93.1	93.1
All commodities other than farm products	92.6	92.6	92.7	92.2	92.1	91.9	92.2	91.9	91.9
All commodities other than farm products and foods	93.7	93.6	93.6	93.1	93.1	93.0	93.1	92.3	92.1

INDEX NUMBERS OF WASTE AND SCRAP MATERIALS

ON OCTOBER 29, 1941, the Bureau of Labor Statistics announced a series of index numbers showing changes in market prices for waste and scrap materials, by weeks, from January 7, 1939, to date. These indexes are calculated for the total 44 waste and scrap materials and the following groups and subgroups—metals, including iron and steel and nonferrous metals; textiles, including cotton, wool, silk and rayon, and old burlap and cordage; paper; and rubber.

The quotations used are those published in standard trade journals, although sales for certain materials are reported to have been made at slightly different prices.

The indexes for waste and scrap materials will be computed weekly and will be available each Tuesday following the week to which the data relate. They are geometric means of the individual price ratios, are unweighted, and are based on average prices in August 1939 as 100 percent.

The products and types of prices for use in these indexes were selected in consultation with experts in the various trades—representing trade journals, trade associations, dealers, and consumers—and with Government officials.

With the beginning of the war in Europe in September 1939, market prices of waste and scrap materials rose sharply, increasing from 99.6 (August 1939=100) for the week ended September 2 to 139.0 for the week ended September 30, 1939. This was a general rise of 39.6 percent within the first month of the war. Wool, silk, and rayon increased over 50 percent, and paper rose 80 percent between the first and last weeks of September. Nonferrous metals and rubber were least affected, rising from 99.8 to 115.8 and from 100.0 to 120.4, respectively, during the same period.

In the early months of 1940 the index for all waste and scrap materials declined gradually to 121.2 for the week ended April 6, 1940. Prices then began a steady upward movement, reaching a high of 166.4 for the week ended November 1, 1941. For the week ended November 22, 1941, the index was 165.5, or 65.5 percent above the average prices for the month of August 1939.

Since March 1941, the Office of Price Administration has placed ceiling prices on many scrap materials. This action checked rapidly rising market prices, and the index for the past few months has fluctuated within narrow limits.

The indexes have been computed back to January 1939 and are available on request.

Trend of Employment and Unemployment

SUMMARY OF REPORTS OF EMPLOYMENT FOR NOVEMBER 1941

Total Nonagricultural Employment

TOTAL civil nonagricultural employment in November (40,711,000) was 3,183,000 greater than in November 1940 and 4,132,000 above the November 1929 level. Employment in mid-November 1941, however, was 66,000 less than in the preceding month, due primarily to seasonal recessions in the manufacturing, transportation, and finance and service groups. The nonagricultural totals do not include CCC enrollees, workers on WPA or NYA projects, nor the armed forces.

The decline in manufacturing employment of 53,000 workers from October to November was less than the seasonally expected decline. Employment in the transportation and public utility group declined 58,000; in the finance, service, and miscellaneous group, by 25,000; and in mining, by 4,000. Gains in employment were reported in trade (61,000), contract construction (10,000), and Federal, State, and local government (3,000).

All major groups showed substantial increases in employment since November 1940, the increase of 1,752,000 in manufacturing industries accounting for the major portion of the total gain over the year interval. In the remaining groups the gains were as follows: Federal, State, and local government, 391,000; trade, 336,000; contract construction, 261,000; transportation and public utilities, 242,000; finance, service, and miscellaneous, 143,000; and mining, 58,000.

Industrial and Business Employment

Employment increases between mid-October and mid-November were reported by 58 of the 157 manufacturing and by 6 of the 16 nonmanufacturing industries regularly surveyed by the Bureau of Labor Statistics. Pay-roll increases were reported by 56 of the manufacturing and 6 of the nonmanufacturing industries.

For all manufacturing industries combined the employment decline of 0.5 percent (53,000 wage earners) was accompanied by a decline of 1.0 percent (\$2,852,000) in weekly wages. These recessions were

due chiefly to seasonal declines in nondurable-goods industries, employment and pay rolls in the durable-goods group showing but slight variation from the preceding month's levels.

In the durable-goods industries, substantial employment gains in November were reported by shipbuilding, aircraft, engine, foundry and machine-shop, tin can, machine tool, and machine-tool accessory establishments.

Seasonal curtailments resulted in substantial employment declines in canning and preserving, sawmills, women's clothing, millinery, men's clothing, and boots and shoes. Among industries in which employment reductions resulted from curtailed operations due to efforts to conserve critical raw materials were brass, bronze, and copper products, and stoves.

The employment and pay-roll indexes for all manufacturing industries combined were 134.7 and 165.2, respectively, on the basis of 100 for the 3-year base period 1923-25.

Employment in anthracite and bituminous-coal mines showed virtually no change between October and November, but pay rolls declined, partly as a result of holidays in the first half of November. Less than seasonal employment reductions were reported by quarries and nonmetallic mines, while employment in metal mines remained at virtually the same level as in the preceding month. Employment in wholesale trade showed a slight contraseasonal gain, chiefly in establishments handling farm products, and in retail trade a larger-than-seasonal increase was reported, despite employment losses experienced by dealers in automobiles, lumber, building material, radios, and household appliances.

Other industries showing reductions in the number of workers were dyeing and cleaning, building construction, laundries, brokerage, and crude-petroleum production. Telephone and telegraph offices and electric light and power companies reduced their personnel, while insurance companies and street railway and bus lines reported slight employment increases.

A preliminary report of the Interstate Commerce Commission for class I steam railroads showed an employment decrease of 1.3 percent between October and November, the total number employed in November being 1,202,006. Corresponding pay-roll figures for November were not available when this report was prepared. For October they were \$206,975,986, a gain of \$10,218,250 since September.

Hours and earnings.—The average hours worked per week by manufacturing wage earners were 40.3 in November, a decline of 2.0 percent since October. Corresponding average hourly earnings were 78.1 cents, a gain of 1.5 percent over the preceding month. The average weekly earnings of factory wage earners (both full and part-time combined) were \$32.81, a decrease of 0.5 percent since October.

Of the 16 nonmanufacturing industries regularly surveyed, 6 reported increases in average weekly earnings. All of the 14 non-manufacturing industries for which man-hours are available showed decreases in average hours worked per week but all showed gains in average hourly earnings.

Wage-rate increases averaging 8.0 percent and affecting 173,900 wage earners were reported by about 600 manufacturing plants, out of a reporting sample of approximately 34,000 plants employing about 7,800,000 wage earners. As the Bureau's survey does not cover all establishments in an industry and, furthermore, as some firms may have failed to report wage-rate changes, these figures should not be construed as representing the total number of wage changes occurring in manufacturing industries.

Employment and pay-roll indexes and average weekly earnings for October and November 1941 and November 1940 are given, where available, in table 1, for all manufacturing industries combined, for selected nonmanufacturing industries, for water transportation, and for class I railroads.

TABLE 1.—*Employment, Pay Rolls, and Earnings in Manufacturing and Nonmanufacturing Industries, November 1940, October and November 1941*

[Preliminary figures]

Industry	Employment index			Pay-roll index			Average weekly earnings		
	November 1941	October 1941	November 1940	November 1941	October 1941	November 1940	November 1941	October 1941	November 1940
All manufacturing industries combined ¹	(1923-25=100)			(1923-25=100)					
	134.7	135.4	114.7	165.2	166.8	116.4	\$32.81	\$32.92	\$26.93
Class I steam railroads ²	(1935-39=100)			(1935-39=100)					
	117.8	119.3	118.7	(3)	(3)	(3)	(3)	(3)	(1)
Coal mining:	(1929=100)			(1929=100)					
Anthracite ⁴	50.2	50.3	50.4	41.8	49.2	37.6	27.38	32.12	24.56
Bituminous ⁴	95.5	95.3	89.8	116.5	122.6	84.5	32.46	34.27	25.21
Metalliferous mining ⁴	79.3	79.7	72.5	90.3	88.3	69.8	35.84	34.86	30.10
Quarrying and nonmetallic mining	52.8	54.1	47.2	57.5	61.5	42.3	27.68	28.88	22.64
Crude-petroleum production	61.0	61.6	61.3	62.5	64.4	56.8	37.58	38.39	34.11
Public utilities:									
Telephone and telegraph ⁶	90.0	90.6	79.2	116.0	117.0	103.2	31.47	31.53	32.01
Electric light and power ⁶	93.5	94.1	91.8	114.5	115.7	106.9	37.36	37.50	35.53
Street railways and busses ^{6, 8}	70.4	70.3	68.7	78.6	78.4	70.3	36.39	36.32	33.40
Trade:									
Wholesale ⁹	96.6	96.3	91.8	92.2	92.0	80.7	33.48	33.48	30.43
Retail ⁶	102.9	101.0	96.3	98.1	97.3	87.1	21.78	22.07	20.70
Hotels (year-round) ^{4, 10}	96.3	96.2	92.3	93.8	91.9	83.6	16.83	16.50	15.75
Laundries ⁴	109.0	111.2	99.7	101.9	103.4	87.2	19.42	19.31	18.13
Dyeing and cleaning ⁴	117.2	121.2	106.0	92.8	98.5	77.8	22.01	22.56	20.13
Brokerage ¹¹	-1.3	-6	-9.4	-8	-12	-4.2	39.92	39.72	37.55
Insurance ¹¹	+1	-2	+2.0	+4	+1.4	+5.9	37.98	37.89	36.42
Building construction ¹¹	+2.8	-1.3	+6.3	-5.1	-2.8	+24.4	35.93	36.50	30.44
Water transportation ¹³	77.4	77.6	75.9	(3)	(3)	(3)	(3)	(3)	(2)

¹ Indexes adjusted to preliminary 1939 Census of Manufactures. See table 9 in December 1940 "Employment and Pay Rolls" for comparable series back to January 1919.

² Preliminary; source—Interstate Commerce Commission.

³ Not available.

⁴ Indexes adjusted to 1935 Census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet, "Employment and Pay Rolls." See also table 7 of October 1940 pamphlet for revised figures for anthracite mining, February to September 1940, inclusive.

⁵ See table 7 of February 1941 pamphlet for revised figures January 1938 to January 1941.

⁶ Retail-trade indexes adjusted to 1935 Census and public utility indexes to 1937 Census. Not comparable with indexes published in pamphlets prior to January 1940 or in the Monthly Labor Review prior to April 1940. Revised series available upon request.

⁷ Average weekly earnings not strictly comparable with figures published in issues of the pamphlet dated earlier than January 1938, or in the Monthly Labor Review dated earlier than April 1938 (except for the January figures appearing in the March issue), as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁸ Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

⁹ Indexes adjusted to 1933 Census. Comparable series in November 1934 and subsequent issues of pamphlet or February 1935 and subsequent issues of Monthly Labor Review.

¹⁰ Cash payments only; the additional value of board, room, and tips cannot be computed.

¹¹ Indexes of employment and pay rolls not available. Percentage changes from October to November 1941, September to October 1941, and November 1940 to November 1941 substituted.

¹² Less than a tenth of 1 percent.

¹³ Based on estimates prepared by the U. S. Maritime Commission covering steam and motor merchant vessels of 1,000 gross tons or over in deep-sea trades only.

Public Employment

Employment in the executive branch of the Federal Government, including civilian employees of the War and Navy Departments and of the various defense agencies, increased 32,700 in the month of November, while the military and naval forces increased 52,200. Corresponding increases over November of last year were 431,000 and 1,245,000. Of the 1,545,000 persons employed in the executive branch in the current month, 200,000 or 13 percent, were force-account workers whose period of employment terminates at the completion of the construction project on which they are engaged.

Increased employment of 81,000 was also created by the Federal Government in the month ending November 15, on construction

projects financed from regular appropriations. The increase was entirely due to defense construction (mainly of naval vessels, airports, and nonresidential buildings), which more than offset the decline in nondefense construction work. Contraction of nondefense work took place principally on Federal-aid road, heavy engineering, nonresidential building, and miscellaneous construction projects. In the month ending November 15, defense and nondefense work together furnished employment to approximately 1,104,000 workers with a pay roll of \$168,198,000.

Partially offsetting the increase during the current month in employment on construction projects financed from regular Federal funds were declines on construction projects financed from USHA, PWA, and RFC funds. The decline in employment on USHA projects was 4,820, or over 10 percent, while that on PWA construction projects was 1,680 or 38 percent. The decline in the RFC employment was negligible. Over the past year substantial curtailments in the USHA low-rent housing program and the PWA program have been somewhat offset by increased activity on defense construction projects of the RFC.

The increase of 15,900 persons working on projects of the Work Projects Administration in the month of November was accompanied by a decrease of \$2,333,000 in pay rolls. Since November of last year WPA personnel declined from 1,819,000 to 1,056,000—42 percent.

Employment on the student-work program of the NYA continued its expansion by adding 67,400 persons in the month of November. Since last year, however, the program has declined 100,000 persons. Employment on the out-of-school work program also increased in the current month, and, although it has been declining since February, showed a net increase over November of last year of 42,100 persons.

Employment in the Civilian Conservation Corps declined only slightly in the month of November, but over the past year declined 150,000 persons, or 47 percent. Payments to the 171,000 persons at work in November amounted to \$8,236,000.

For the regular Federal services, data for the legislative, judicial, and force-account employees, and for the military and naval personnel are reported to the Bureau of Labor Statistics by the respective offices, while data for the executive service employees are reported through the Civil Service Commission. The Bureau of Labor Statistics receives monthly reports on employment and pay rolls for the various construction projects financed wholly or partially by Federal funds directly from the contractors and subcontractors, and for the work relief programs from the respective agencies.

A summary of employment and pay-roll data in the regular Federal services and on construction and work-relief projects financed wholly or partially from Federal funds is given in table 2.

TABLE 2.—*Employment and Pay Rolls in Regular Federal Services and on Projects Financed Wholly or Partially from Federal Funds for November 1940, October and November 1941¹*

[Preliminary figures]

Class	Employment			Pay rolls		
	November 1941	October 1941	November 1940	November 1941	October 1941	November 1940
Federal services:						
Executive ²	1,545,311	1,512,428	1,114,068	\$237,398,486	\$235,855,055	\$168,618,728
Judicial	2,582	2,569	2,391	654,806	653,725	638,536
Legislative	6,202	6,242	5,932	1,360,645	1,341,587	1,294,629
Military	2,066,643	2,014,453	821,662	142,235,606	138,645,087	52,796,914
Construction projects:						
Financed by regular Federal appropriations	1,104,159	1,023,182	630,848	168,197,921	155,745,748	65,138,967
Defense	928,424	830,883	443,001	146,679,999	132,240,571	49,388,021
Other	175,735	192,299	187,847	21,517,922	23,505,177	15,750,946
USHA low-rent housing	36,000	40,820	50,806	4,085,000	4,552,414	5,502,764
Defense	9,650	12,091	4,705	1,070,000	1,341,940	400,871
Other	26,350	28,729	46,101	3,015,000	3,210,474	5,101,893
Financed by PWA ³	2,700	4,381	31,117	322,800	494,334	3,614,039
Financed by RFC ⁴	23,590	23,853	2,405	3,590,705	3,431,600	239,815
Defense	21,530	21,806	(7)	3,313,032	3,149,994	(7)
Other	2,060	2,047	(7)	277,673	281,606	(7)
Work Projects Administration projects:						
Defense	1,056,401	1,040,483	1,819,371	60,600,000	62,933,276	94,275,585
Other	324,107	328,350	(7)	18,100,000	20,079,987	(7)
National Youth Administration:						
Student-work program	732,294	712,133	(7)	42,500,000	42,853,289	(7)
Out-of-school work program	341,308	273,942	441,456	2,367,642	1,735,728	3,078,617
Civilian Conservation Corps	308,825	292,970	266,759	7,500,523	7,141,030	5,504,433
	171,407	172,706	321,157	8,235,837	8,465,633	14,016,434

¹ An explanation of the employment count and pay roll period is contained in footnotes to the detailed tables of a separate pamphlet entitled "Employment and Pay Rolls, October 1941."

² Includes force-account and supervisory and technical employees shown under other classifications to the extent of 224,000 employees and \$34,309,566 pay roll for November, and 207,680 employees and \$33,536,584 pay roll for October.

³ Part of data estimated.

⁴ Data for Federal-aid roads estimated.

⁵ Includes data covering PWA projects financed from Emergency Relief Appropriation Acts of 1935, 1936, 1937 funds, as follows: For November, 1,160 wage earners and \$133,300 pay roll; for October, 1,955 wage earners and \$212,581 pay roll. Also includes data covering PWA projects financed from Public Works Administration Appropriation Act of 1938, as follows: For November, 1,430 wage earners and \$179,500 pay roll; for October, 2,328 wage earners and \$271,580 pay roll. Also includes data for PWA projects financed from National Industrial Recovery Act funds, as follows: For November 110 wage earners and \$10,000 pay roll; for October 98 wage earners and \$10,173 pay roll.

⁶ Includes 1,218 employees and \$149,238 pay roll for November; 613 employees and \$95,224 pay roll for October on projects financed by the RFC Mortgage Company.

⁷ Defense and other categories not set up.

DETAILED REPORTS FOR INDUSTRIAL AND BUSINESS EMPLOYMENT, OCTOBER 1941

A MONTHLY report on employment and pay rolls is published as a separate pamphlet by the Bureau of Labor Statistics. This gives detailed data regarding employment, pay rolls, working hours, and earnings for the current month for industrial and business establishments and for the various forms of public employment. This pamphlet is distributed free upon request. Its principal contents for the month of October 1941, insofar as industrial and business employment is concerned, are reproduced here.

Estimates of Nonagricultural Employment

In table 1 are given estimates of nonagricultural employment by major groups. The figures represent the number of persons working

at any time during the week ending nearest the middle of the month and, for all groups combined, have been adjusted to the number of nonagricultural "gainful workers" shown by the 1930 Census of Occupations less the number who were unemployed for 1 week or more at the time of the Census. The estimates for the individual groups are based in large part on industrial censuses and on regular reports of employers to the Bureau of Labor Statistics and to other Government agencies. Estimates of "Employees in nonagricultural establishments" by States are given each month in the pamphlet mentioned above.

TABLE 1.—*Estimates of Total Nonagricultural Employment, by Major Groups*
[In thousands]

Employment Group	October 1941 (preliminary)	September 1941	Change September to October 1941	October 1940	Change October 1940 to October 1941
Total civil nonagricultural employment ¹	40,767	40,708	+59	37,375	+3,392
Civil employees in nonagricultural establishments ²	34,624	34,565	+59	31,232	+3,392
Manufacturing ³	12,786	12,775	+11	10,914	+1,872
Mining	908	906	+2	856	+52
Contract construction	1,980	1,936	+44	1,654	+326
Transportation and public utilities	3,364	3,367	-3	3,121	+243
Trade ⁴	7,068	7,008	+60	6,706	+362
Finance, service, and miscellaneous ⁴	4,252	4,325	-73	4,105	+147
Federal, State, and local government	4,266	4,248	+18	3,876	+390
Military and naval forces (not included above)	2,014	1,992	+22	733	+1,281

¹ Excludes employees on WPA and NYA projects and enrollees in CCC camps. Includes proprietors, firm members, self-employed persons, casual workers, and domestic servants. Includes allowance for adjustment of factory wage-earner totals to preliminary 1939 Census of Manufactures. Revised series available on request.

² Excludes all of the groups omitted from "total civil nonagricultural employment" as well as proprietors, firm members, self-employed persons, casual workers, and domestic servants.

³ Adjusted to preliminary 1939 Census of Manufactures.

⁴ Revised. Earlier figures available on request.

Industrial and Business Employment

Monthly reports on employment and pay rolls are available for 157 manufacturing industries; 16 nonmanufacturing industries, including private building construction; water transportation; and class I steam railroads. The reports for the first 2 of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics. The figures on water transportation are based on estimates prepared by the Maritime Commission and those on class I steam railroads are compiled by the Interstate Commerce Commission.

The employment, pay-roll, hours, and earnings figures for manufacturing, mining, laundries, and dyeing and cleaning, cover wage earners only, but the figures for public utilities, brokerage, insurance, and hotels, relate to all employees except corporation officers and executives, while for trade they relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover wage earners and clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from approximately 25 percent for wholesale and retail trade, dyeing and cleaning, and insurance, to approximately 80 percent for quarrying and non-

metallic mining, anthracite mining, and public utilities, and 90 percent for metal mining.

The general manufacturing indexes are computed from reports supplied by representative manufacturing establishments in 90 of the 157 industries surveyed. These reports cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 90 industries covered.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and the amount of pay rolls for the pay period ending nearest the 15th of the month.

The average weekly earnings shown in table 2 are computed by dividing the weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply information on man-hours, average hours worked per week and average hourly earnings are necessarily based on data furnished by a slightly smaller number of reporting firms. The size and composition of the reporting sample vary somewhat from month to month and, therefore, the average hours per week, average hourly earnings, and average weekly earnings shown may not be strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movement of earnings and hours over the period shown. The changes from the preceding month, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from October 1940 are computed from the chain indexes based on the month-to-month percentage changes.

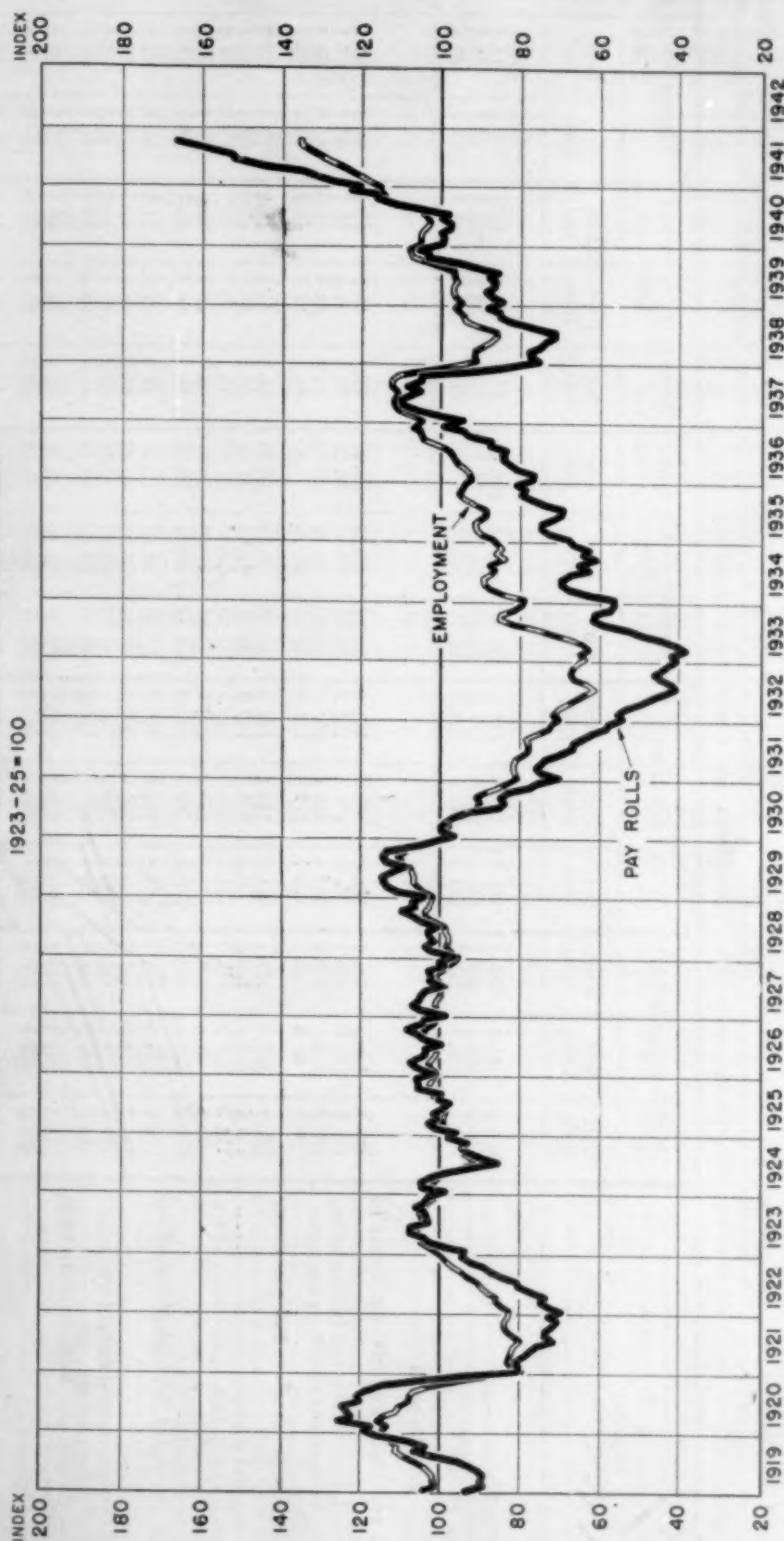
EMPLOYMENT AND PAY-ROLL INDEXES, AVERAGE HOURS, AND AVERAGE EARNINGS

Employment and pay-roll indexes, as well as average hours worked per week, average hourly earnings, and average weekly earnings for August, September, and October 1941, where available, are presented in table 2. The August and September figures, where given, may differ in some instances from those previously published because of revisions necessitated primarily by the inclusion of late reports. Indexes of employment and pay rolls are given in table 3 for 55 additional manufacturing industries for the months of August, September, and October 1941. These indexes are based on 1939 as 100 and are available in mimeographed form for the period from January 1939 to January 1941, inclusive.

In table 4 indexes of employment and pay rolls are given for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries, and for each of 13 non-manufacturing industries, by months, from October 1940 to October 1941, inclusive. The chart on page 257 indicates the trend of factory employment and pay rolls from January 1919 to October 1941.

EMPLOYMENT AND PAY ROLLS ALL MANUFACTURING INDUSTRIES

1923-25=100



ADJUSTED TO 1939 CENSUS OF MANUFACTURERS

UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

TABLE 2.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*

MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100. For "all manufacturing," "durable goods," "nondurable goods," and "aluminum manufactures," they have been adjusted to preliminary 1939 Census figures. The indexes for all other manufacturing groups and industries have been adjusted to 1937 Census figures, except as otherwise noted, and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request.]

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941
All manufacturing^{2,3}	135.3	135.2	133.1	166.6	162.6	158.1	\$32.89	\$32.05	\$31.66	41.1	40.9	41.0	77.0	75.8	74.5
Durable goods ³	144.0	142.1	138.7	191.1	183.2	177.6	37.97	36.79	36.55	42.9	42.3	42.6	85.3	84.3	83.0
Nondurable goods ³	137.1	128.7	127.7	139.2	139.5	136.3	26.10	25.78	25.38	39.1	39.5	39.4	68.0	66.8	65.8
Durable goods															
Iron and steel and their products, not including machinery	139.5	140.5	139.9	173.0	170.5	172.0	36.36	35.60	36.07	41.5	40.7	41.4	87.7	87.5	87.1
Blast furnaces, steel works, and rolling mills	147.9	148.9	149.1	181.0	178.4	183.3	38.65	37.81	38.81	39.9	38.9	40.1	96.9	97.1	96.8
Bolts, nuts, washers and rivets	169.8	170.6	171.3	255.7	246.3	257.3	35.90	34.51	36.02	44.3	42.9	45.0	81.6	80.5	80.0
Cast-iron pipe	98.0	97.8	96.1	119.1	115.8	111.8	29.16	28.42	27.91	41.3	41.4	41.1	70.0	68.3	67.6
Cutlery (not including silver and plated cutlery) and edge tools	131.7	127.8	127.4	154.3	149.5	147.5	30.80	30.76	30.38	44.0	44.3	44.0	70.7	70.2	70.2
Forgings, iron and steel	113.8	112.9	110.6	180.0	173.4	169.8	42.91	41.75	41.58	46.2	45.2	45.9	93.3	92.6	90.8
Hardware ⁴	115.2	116.0	113.2	151.5	148.7	145.7	32.29	31.35	31.42	43.1	42.1	42.7	74.9	74.4	73.6
Plumbers' supplies ⁴	99.5	99.4	99.4	114.7	106.3	107.1	33.38	31.04	30.21	42.0	40.5	40.1	79.4	76.6	75.3
Stamped and enameled ware	227.2	227.9	224.5	296.2	290.5	286.0	30.48	29.81	29.82	41.7	41.3	41.5	73.2	72.4	71.9
Steam and hot-water apparatus and steam fittings	128.4	127.4	125.2	157.7	154.9	147.7	37.00	36.64	35.51	44.9	44.8	44.0	82.0	82.0	81.1
Stoves	115.7	116.2	117.2	130.6	127.9	127.4	31.64	30.97	30.48	42.0	41.4	41.5	76.0	74.9	73.7
Structural and ornamental metalwork	109.5	109.3	110.0	126.9	123.2	124.9	37.90	36.57	36.82	44.2	43.3	44.2	85.2	84.6	83.5
Tin cans and other tinware	130.1	145.0	145.3	156.6	187.6	184.7	26.95	28.92	28.42	41.9	42.5	42.9	64.3	68.3	66.9
Tools (not including edge tools, machine tools, files, and saws)	145.5	144.4	142.6	202.0	196.6	190.1	35.50	34.80	34.03	46.9	46.3	46.5	75.4	75.2	73.5
Wirework	204.9	208.0	189.8	277.1	272.2	247.9	32.63	31.70	31.68	42.0	41.3	42.0	77.9	76.8	73.5
Machinery, not including transportation equipment	150.1	178.6	176.5	255.6	248.2	243.4	39.29	38.48	38.19	45.4	45.1	45.1	86.1	85.0	84.4
Agricultural implements (including tractors)	169.9	170.7	172.0	231.6	230.7	227.5	37.46	37.12	36.31	40.7	40.5	40.1	92.3	92.0	90.7
Cash registers, adding machines, and calculating machines	174.9	172.6	170.3	233.1	230.2	223.1	41.45	41.47	40.76	44.9	45.0	44.6	92.7	92.8	91.8
Electrical machinery, apparatus, and supplies	169.0	168.7	167.4	244.9	241.4	240.0	37.82	37.25	37.44	43.8	43.5	43.9	86.3	85.7	83.3

Engines, turbines, water wheels, and wind-mills	338.8	324.3	314.1	614.3	571.8	545.1	47.81	46.62	46.02	48.9	46.5	46.2	102.9	100.5	96.7
Foundry and machine-shop products	147.8	147.0	145.6	194.7	187.8	186.0	38.84	37.77	37.72	46.0	45.4	45.0	84.3	82.9	82.6
Machine tools	361.5	356.8	351.5	593.8	578.2	553.4	45.47	44.74	43.53	51.8	51.4	51.2	87.4	87.0	85.0
Radio and phonographs	217.9	212.5	202.4	291.8	254.4	234.0	29.36	26.25	28.32	41.8	42.1	41.3	70.3	69.7	68.7
Textile machinery and parts	109.2	108.5	108.4	142.3	141.1	135.8	35.52	35.84	34.49	47.0	47.6	46.4	73.4	73.8	74.4
Typewriters and parts	160.7	158.2	155.7	232.8	233.4	222.3	35.52	36.16	35.01	47.0	47.7	46.4	73.6	73.8	73.4
Transportation equipment ¹	302.9	190.6	172.0	281.4	232.1	224.4	43.61	41.65	41.93	43.0	41.7	41.8	101.9	100.3	98.8
Aircraft ²	9,174.8	8,513.7	7,897.3	12,301.6	11,145.8	10,403.0	36.21	38.19	38.08	45.2	45.6	45.6	86.9	84.5	84.5
Automobiles ³	128.8	124.0	110.9	176.4	159.1	139.2	44.32	41.73	41.09	40.7	38.9	39.0	109.3	108.0	105.5
Cars, electric, and steam-railroad	96.8	95.1	89.2	115.3	101.2	93.7	37.84	33.80	33.29	42.8	38.9	39.4	88.4	86.8	84.4
Locomotives ¹	74.7	72.2	70.2	102.9	98.5	93.4	42.12	41.68	40.71	45.8	45.2	44.7	92.0	92.3	91.1
Shipbuilding	492.0	439.6	388.3	707.7	700.1	614.6	47.54	46.60	40.47	45.4	44.9	44.4	105.4	104.0	103.0
Nonferrous metals and their products ¹	147.4	146.5	145.5	185.1	185.8	182.6	34.89	35.24	34.85	42.7	43.1	43.0	82.2	82.1	80.5
Aluminum manufactures ¹	242.5	243.1	240.9	355.0	354.8	345.8	36.27	35.67	35.67	42.4	42.4	42.6	86.1	85.5	83.7
Brass, bronze, and copper products	192.6	193.5	192.9	294.7	270.8	273.6	38.05	38.65	39.17	43.0	43.8	44.4	88.7	88.7	88.7
Clocks and watches and time-recording devices ¹	117.8	111.3	118.0	160.0	148.8	156.4	30.10	29.54	29.30	43.3	42.7	43.0	60.6	60.2	68.2
Jewelry	121.0	120.1	118.0	122.4	121.4	113.3	27.03	27.04	25.76	43.5	43.6	42.4	63.3	62.5	60.5
Lighting equipment ¹	126.3	121.4	111.8	139.2	141.2	118.7	34.29	36.20	32.85	42.5	43.5	41.9	81.1	83.2	78.4
Silverware and plated ware	87.1	85.8	84.8	102.9	103.7	94.4	34.41	35.10	32.33	45.7	46.4	44.1	75.5	76.3	74.1
Smelting and refining—copper, lead and zinc	101.4	103.0	103.5	120.2	118.2	118.4	33.24	32.32	32.29	39.5	39.1	39.5	84.6	82.6	81.7
Lumber and allied products	79.7	80.4	81.0	92.3	90.8	92.3	25.12	24.47	24.85	41.5	41.1	41.8	59.8	59.0	58.8
Furniture	107.4	107.6	108.4	120.4	118.0	116.1	26.55	26.03	25.46	42.9	42.3	42.2	62.4	61.7	60.8
Lumber:															
Millwork	76.8	76.4	78.0	74.9	72.9	74.8	26.95	26.17	26.44	43.3	42.8	43.3	61.8	61.1	61.0
Sawmills	69.4	70.4	70.7	78.3	77.5	80.3	23.25	22.72	23.49	40.2	39.7	41.0	57.8	57.2	57.3
Stone, clay, and glass products	101.9	101.8	101.3	109.3	105.4	104.2	22.41	22.97	22.98	39.2	38.2	38.5	74.4	73.6	72.1
Brick, tile, and terra cotta	77.5	79.1	76.4	75.7	76.2	77.0	25.76	25.27	25.30	39.2	38.7	38.8	65.6	65.3	64.8
Cement	82.0	83.8	83.5	92.8	93.5	93.9	32.17	31.60	31.82	40.9	40.2	40.7	78.2	78.6	78.2
Glass	132.3	130.3	130.0	173.7	160.5	155.4	32.14	30.19	29.28	38.8	37.3	37.6	83.6	81.2	73.1
Marble, granite, slate, and other products	46.6	45.9	44.6	37.4	36.8	36.1	28.18	28.06	28.30	38.8	38.5	38.8	72.4	73.1	68.7
Pottery	124.0	121.0	119.4	130.8	124.8	124.1	26.93	26.09	26.22	38.8	37.9	38.3	69.5	69.1	68.7
Nondurable goods															
Textiles and their products	114.7	115.5	115.4	122.3	123.4	119.3	21.94	21.73	21.04	37.6	35.3	35.1	58.1	56.9	55.4
Fabrics	106.2	106.3	106.9	120.1	118.0	114.4	21.81	21.38	20.63	38.8	39.1	38.9	56.6	55.1	53.3
Carpets and rugs	90.5	91.0	90.5	93.6	94.6	93.4	28.58	28.33	28.53	39.0	39.9	39.7	73.3	73.6	72.1
Cotton goods	111.0	110.2	109.9	135.8	130.2	126.2	19.76	19.12	18.58	39.3	39.6	39.4	50.3	48.3	47.9
Cotton smallwares	109.2	107.9	106.4	128.1	128.2	123.3	22.91	23.15	22.59	40.9	41.5	41.2	56.3	56.1	54.9
Dyeing and finishing textiles	135.1	136.0	136.3	135.9	135.7	132.5	24.53	24.14	23.57	39.2	40.0	40.1	61.5	59.7	58.2
Hats, fur-felt	77.8	79.2	82.0	75.1	80.4	90.5	27.87	30.38	32.2	34.4	37.0	37.0	82.8	81.0	83.1
Hosiery ¹	135.2	136.1	141.5	160.6	151.1	153.9	20.87	19.50	19.14	35.6	35.0	35.7	57.3	54.9	53.8
Knitted underwear	82.8	82.5	81.3	79.8	80.6	77.3	19.92	19.70	19.70	38.1	38.9	38.6	51.4	51.1	50.3
Knitted underwear	88.4	88.0	86.4	98.6	95.7	90.8	18.88	18.32	17.75	39.0	39.2	38.5	48.1	46.3	45.8
Knitted cloth ¹	151.2	161.1	161.4	148.4	150.6	157.3	22.61	22.31	22.31	39.7	39.9	40.1	56.4	55.1	55.1

See footnotes at end of table.

TABLE 2.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued*
MANUFACTURING—Continued

[Indexes are based on 3-year average, 1923-25=100. For "all manufacturing," "durable goods," "nondurable goods," and "aluminum manufactures," they have been adjusted to preliminary 1939 census figures. The indexes for all other manufacturing groups and industries have been adjusted to 1937 Census figures, except as otherwise noted, and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request.]

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941
<i>Nondurable goods—Continued</i>															
<i>Textiles and their products—Continued:</i>															
Silk and rayon goods.....	61.9	63.2	67.9	61.5	61.5	63.7	\$20.73	\$20.16	\$19.37	38.4	38.0	37.8	53.8	52.9	50.8
Woolen and worsted goods.....	109.6	110.5	108.9	126.7	129.2	118.5	26.81	27.13	25.21	39.0	39.7	39.6	68.9	68.5	63.6
Wearing apparel.....	129.1	131.2	129.6	119.2	126.4	121.7	22.30	22.70	22.18	35.4	36.7	36.4	61.0	60.2	59.6
Clothing, men's.....	123.6	123.6	123.3	113.4	114.7	114.0	23.43	23.64	23.68	35.2	36.5	36.3	66.0	64.5	64.7
Clothing, women's.....	172.5	177.5	175.7	145.0	162.1	154.3	22.44	24.39	23.45	34.9	36.5	36.0	61.0	61.7	60.8
Corsets and allied garments.....	111.5	122.5	119.1	142.9	150.9	139.4	21.29	20.47	19.49	38.8	38.8	37.4	53.6	52.3	51.6
Men's furnishings.....	133.6	131.5	128.1	166.8	156.5	144.4	18.65	17.75	16.77	37.9	37.4	36.4	48.1	46.0	44.8
Millinery.....	77.2	85.3	79.8	59.6	84.2	74.5	23.57	30.14	28.54	34.7	33.6	33.0	73.0	73.8	74.0
Shirts and collars.....	137.1	136.4	133.6	156.5	146.7	140.6	18.15	17.10	16.69	38.0	37.8	37.4	48.1	45.4	44.8
<i>Leather and its manufactures</i>															
Boots and shoes.....	98.4	98.9	101.1	100.5	101.6	104.7	23.60	23.71	23.97	37.8	38.0	38.2	63.2	63.0	61.5
Leather.....	94.7	95.2	98.3	98.3	95.3	100.7	22.07	22.35	22.90	37.1	37.4	38.8	60.2	60.1	59.0
	96.6	97.0	94.8	116.4	114.2	109.0	30.44	29.51	28.86	40.5	40.0	40.7	74.9	74.0	71.4
<i>Food and kindred products¹</i>															
Baking.....	152.4	162.7	159.3	182.9	170.1	165.5	27.14	26.56	26.33	40.9	41.6	41.0	67.9	65.7	65.8
Beverages.....	154.5	153.5	152.7	157.6	157.4	155.2	28.18	28.32	28.06	41.9	42.0	41.8	67.5	67.4	67.2
Butter.....	302.6	315.1	328.1	381.3	401.5	429.7	36.92	37.40	38.49	40.6	41.1	42.4	92.2	91.9	91.5
Canning and preserving.....	102.4	106.4	111.1	96.8	99.6	105.1	24.74	24.39	24.77	45.9	46.2	47.5	53.4	52.5	51.7
Confectionery.....	218.4	321.6	304.4	244.4	359.1	324.7	21.23	21.21	20.27	39.8	42.2	39.8	54.7	51.1	52.0
Flour.....	106.3	101.5	91.1	122.0	114.8	100.6	22.16	21.81	21.39	40.6	40.2	38.6	54.7	54.5	53.5
Ice cream.....	80.1	80.6	78.1	88.3	92.5	80.9	29.66	30.86	28.07	44.3	45.3	42.9	66.1	67.2	64.4
Slaughtering and meat packing.....	78.2	84.3	94.8	71.1	77.2	84.2	30.78	29.99	29.99	44.7	45.3	46.8	68.2	68.4	64.0
Sugar, beet.....	125.9	123.6	122.4	151.0	145.8	142.9	31.20	30.63	30.31	39.8	39.6	39.6	78.7	78.0	76.6
Sugar, cane.....	244.5	90.5	63.6	229.1	95.2	67.8	24.41	27.41	27.64	36.8	35.7	36.4	65.3	77.4	77.4
Sugar refining, cane.....	103.3	103.7	95.4	93.9	103.3	100.3	25.75	28.22	29.77	37.7	41.5	44.0	68.4	68.0	67.7
<i>Tobacco manufactures</i>															
Chewing and smoking tobacco and snuff.....	67.3	63.9	65.8	75.6	70.4	70.0	20.36	20.00	19.37	38.7	38.3	37.9	52.7	52.5	52.0
Cigars and cigarettes.....	54.3	53.6	52.3	70.8	69.3	68.2	21.14	20.87	21.08	36.7	36.6	36.6	57.9	57.4	57.8
	69.0	65.2	67.5	76.0	73.4	70.1	20.22	19.84	19.06	38.9	38.4	37.3	52.2	51.9	51.4
<i>Paper and printing</i>															
Boxes, paper.....	126.5	124.9	123.9	135.9	133.5	130.9	32.71	32.34	32.04	40.3	40.1	40.1	83.5	83.0	82.4
Paper and pulp.....	146.8	144.7	142.0	194.5	187.9	181.9	26.58	26.06	25.72	42.7	42.3	41.9	62.5	62.0	61.8
	128.2	128.4	127.8	165.2	163.0	162.7	31.73	31.17	31.18	43.4	42.9	43.1	73.1	72.8	72.5

	126.5	124.9	123.9	123.9	135.9	133.8	130.9	32.71	32.34	32.04	40.3	40.1	53.5	83.0	82.4
	146.8	144.7	142.0	141.9	159.5	157.9	151.9	26.58	26.06	25.72	42.7	42.3	62.5	62.0	61.8
	128.2	128.4	127.8	127.8	105.2	105.2	103.0	31.73	31.17	31.18	43.4	42.9	73.1	72.8	72.5
Paper and printing	108.1	104.8	105.5	105.5	102.6	102.6	99.3	33.08	32.83	32.23	39.9	39.9	83.2	82.9	81.6
Books and job	118.1	116.9	114.7	114.7	114.8	114.8	114.0	39.42	39.63	38.88	35.8	35.7	107.6	107.6	107.0
Newspapers and periodicals	148.1	146.4	141.9	141.9	190.7	186.7	179.8	34.56	34.15	33.78	40.2	40.0	85.0	84.5	83.7
Chemicals, petroleum, and coal products	129.2	128.5	127.9	127.9	168.0	166.4	159.1	40.40	40.14	38.57	36.9	37.2	109.6	108.3	102.5
Petroleum refining	162.7	160.8	145.3	145.3	197.7	192.9	186.2	32.64	32.17	32.16	41.1	40.6	77.9	77.6	78.0
Other than petroleum refining	182.5	181.9	180.1	180.1	249.4	250.1	247.2	36.34	36.57	36.57	41.0	40.8	88.6	88.6	88.5
Chemicals	136.0	115.2	70.9	70.9	146.5	115.4	65.1	17.32	16.05	14.82	46.6	44.7	35.9	35.6	37.1
Cottonseed—oil, cake, and meal	145.6	142.9	135.7	135.7	183.4	176.1	165.0	28.08	27.44	27.03	41.9	40.3	63.9	63.0	63.8
Druggists' preparations	(10)	(10)	(10)	(10)	(10)	(10)	(10)	40.24	38.89	38.46	43.3	43.0	93.0	90.4	89.4
Explosives	103.6	110.2	89.6	89.6	102.7	111.6	90.8	18.45	18.77	18.67	36.8	36.5	50.1	51.4	51.7
Fertilizers	144.0	143.9	144.8	144.8	173.7	169.9	171.5	32.27	32.56	32.65	41.2	41.3	80.9	78.9	78.4
Paints and varnishes	325.0	327.0	329.3	329.3	386.4	374.3	368.2	30.42	29.29	28.60	39.4	39.2	77.3	74.6	72.8
Rayon and allied products	97.7	98.2	97.4	97.4	142.2	139.6	135.1	34.28	33.50	32.66	41.2	41.1	83.2	81.5	79.0
Soap	111.8	111.5	111.8	111.8	138.3	134.2	138.8	33.26	32.68	32.78	39.1	38.5	96.5	95.9	86.1
Rubber products	80.4	77.2	79.4	79.4	106.9	104.1	102.2	30.58	31.00	29.60	41.8	42.7	73.0	72.6	71.5
Rubber boots and shoes	86.2	86.5	86.7	86.7	112.3	107.3	116.4	38.03	36.19	39.17	35.8	34.7	105.8	104.6	106.2
Rubber tires and inner tubes	192.4	193.2	192.9	192.9	234.0	231.6	228.3	29.52	29.00	28.76	41.6	41.2	71.2	70.9	70.0
Rubber goods, other															

NONMANUFACTURING

[Indexes are based on 12-month average, 1929=100, except for class I railroads, which are based on 1935-39 as 100]

	50.3	50.0	50.0	50.0	49.2	49.6	51.1	\$32.12	\$32.60	\$33.56	31.9	33.4	33.8	Cents	Cents	Cents
Coal mining:	95.0	94.2	92.6	92.6	122.6	115.5	117.3	34.48	32.75	33.85	32.7	31.5	32.7	100.6	98.2	98.9
Anthracite	79.4	79.4	79.9	79.9	88.4	85.9	85.4	35.05	34.04	33.68	42.7	41.6	41.9	103.3	103.7	103.3
Bituminous	53.8	54.2	53.9	53.9	60.8	60.6	59.3	28.12	27.79	27.91	43.9	43.8	43.7	82.4	82.1	80.8
Metallic mining	61.3	61.8	62.2	62.2	69.0	64.4	61.5	37.78	38.38	38.26	37.8	38.5	37.9	64.1	63.3	64.1
Quarrying and nonmetallic mining	90.6	90.3	89.6	89.6	117.6	117.3	116.4	31.75	31.75	31.75	40.0	40.3	40.2	79.9	79.3	79.2
Crude-petroleum production	93.9	94.9	95.2	95.2	116.0	115.0	115.1	37.56	36.81	36.75	40.7	40.0	40.3	92.6	92.5	91.5
Public utilities:	70.1	70.3	69.7	69.7	78.1	78.1	78.6	36.33	36.20	36.67	46.5	46.4	47.4	76.9	77.1	76.3
Telephone and telegraph	96.6	95.6	95.8	95.8	92.0	90.9	89.8	33.36	33.28	32.60	41.4	41.0	41.1	80.9	81.2	79.8
Electric light and power	100.9	100.0	96.9	96.9	97.5	95.8	94.0	22.17	22.11	22.43	42.3	42.4	42.8	57.2	56.8	57.4
Street railways and busses	110.6	109.7	108.4	108.4	107.2	105.8	105.3	24.88	24.80	24.95	42.2	42.5	43.1	56.5	56.0	55.4
Trade:	115.6	111.7	103.0	103.0	110.3	105.6	99.3	18.84	18.83	18.94	38.4	38.9	38.5	48.5	47.8	48.9
Wholesale	81.0	79.5	78.5	78.5	85.0	77.9	77.8	22.25	22.19	22.54	37.9	37.8	38.4	58.8	58.7	58.7
Retail	87.5	89.7	92.8	92.8	86.2	86.3	85.7	31.72	30.51	30.19	44.4	44.3	44.0	72.6	72.2	71.5
Food	82.9	83.4	83.2	83.2	87.1	87.1	85.4	29.50	28.83	30.71	47.2	46.8	47.4	63.1	62.3	60.0
Apparel																
Furniture																
Automotive																
Lumber																

See footnotes at end of table.

TABLE 2.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued*

NONMANUFACTURING—Continued

[Indexes are based on 12-month average, 1929=100, except for class I railroads, which are based on 1935-39 as 100]

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941
Hotels (year-round) ^{11 12 13}	95.6	95.7	94.5	92.0	90.0	88.2	816.68	816.27	816.13	46.2	45.4	46.1	35.9	35.6	34.7
Laundries ¹¹	110.9	113.0	114.8	103.2	105.2	104.7	19.31	19.33	18.94	43.9	43.3	43.2	45.3	44.9	44.1
Dyeing and cleaning ¹¹	121.0	121.5	118.9	98.4	98.5	92.1	22.51	22.69	21.44	44.0	44.7	43.2	52.4	51.9	50.8
Brokers ^{14 20 21}	-0.4	-1.2	+0.8	+0.9	-0.8	+1.4	40.29	39.79	39.47	(10)	(10)	(10)	(10)	(10)	(10)
Insurance ^{14 20}	-1.1	-1.3	+4	+1.0	-6	+4	37.69	37.35	37.33	(10)	(10)	(10)	(10)	(10)	(10)
Building construction ²²	-1.3	-1.6	+2.1	-3.8	+1.3	+3.3	36.50	37.10	35.76	35.7	36.5	35.7	102.3	101.7	100.1
Water transportation ²³	77.6	78.5	79.3	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)
Class I steam railroads ²⁴	119.3	118.7	118.3	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)

¹ Mimeographed sheets giving averages by years, 1932 to 1939, inclusive, and by months, January 1938 to August 1940, inclusive, available on request. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments than average weekly earnings, as not all reporting firms furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

² See tables 9, 10, and 11 in the December 1940 issue of "Employment and Pay Rolls" for comparable series back to January 1919 for all manufacturing, and back to January 1923 for the durable- and nondurable-goods groups.

³ Revisions in the following industries and groups have been made as indicated:

All manufacturing.—July 1941 employment index to 130.7.
Durable-goods group.—July 1941 employment and pay-roll indexes to 137.5 and 172.2, respectively.

Nondurable-goods group.—July 1941 pay-roll index to 130.7.

Hardware.—July 1941 pay-roll index, average hourly earnings, and average weekly earnings to 123.8, 71.0 cents, and \$29.20, respectively.

Transportation group.—April, May, June, and July 1941 employment indexes to 166.3, 171.7, 177.8, and 179.6; pay-roll indexes to 191.6, 217.0, 240.0, and 228.8.

Aircraft.—June and July 1941 employment indexes to 6718.1 and 7231.3; pay-roll indexes to 8193.5 and 9045.7; average hours to 45.0 and 44.8; July hourly and weekly earnings to 81.2 cents and \$36.57.

Nonferrous group.—July 1941 employment and pay-roll indexes to 143.1 and 173.7.

Clocks and watches, and time-recording devices.—May 1941 average hours and average hourly earnings to 42.3 hours and 64.6 cents; June hourly and weekly earnings to 66.0 cents and \$27.94; July employment index, pay-roll index, and weekly earnings to 118.2, 138.3, and \$25.85.

Lighting equipment.—April, May, June, and July 1941 employment indexes to 113.2, 111.6, 113.0, and 111.4; pay-roll indexes to 106.0, 110.4, 116.3, and 113.2; average hourly earnings to 72.8, 74.8, 77.8, and 77.6 cents; average weekly earnings to \$30.01, \$30.62, \$31.86 and \$31.43; May, June, and July average hours to 41.0, 41.0, and 40.5 hours.

Hostery.—July 1941 average hours and average weekly earnings to 36.9 hours and \$19.78. *Food group*.—July 1941 average hours to 40.9; average hourly earnings to 66.2 cents.

Chemicals.—June 1941 employment index, pay-roll index, average hours, average hourly earnings, and average weekly earnings to 172.2, 232.7, 41.6 hours, 86.6 cents, and \$36.04; July employment index to 175.9.

⁴ See table 7 in the April 1941 issue of "Employment and Pay Rolls" for revised figures from January 1940 to March 1941.

⁵ Adjusted on basis of complete employment survey of the aircraft industry made by the Bureau of Labor Statistics for August 1940. Not comparable with previously published indexes from January 1939 to August 1940, inclusive. Comparable figures for this period given in table 9 of the September 1940 issue of "Employment and Pay Rolls."

⁶ The indexes for "Automobiles" have been adjusted to 1933 Census figures, but not to later Census figures because of problems involving integrated industries.

¹ *Locomotives*.—Indexes, hours and earnings revised as follows:

Year and month	Indexes		Average hours worked per week	Average hourly earnings	Average weekly earnings
	Employment	Pay rolls			
1940				Cents	
August.....	32.6	32.7	38.7	79.2	\$30.02
September.....	34.5	37.2	41.3	79.9	32.98
October.....	38.0	40.8	41.4	79.2	32.79
November.....	40.6	43.1	40.2	80.6	32.43
December.....	43.4	48.2	41.9	81.1	34.00
1941					
January.....	46.1	52.5	42.8	81.4	34.79
February.....	49.2	57.5	43.6	82.0	35.72
March.....	51.6	60.7	43.7	82.2	35.91
April.....	55.1	67.8	44.4	84.6	37.59
May.....	59.4	75.9	43.9	89.1	38.08
June.....	61.8	84.1	45.8	90.9	41.62
July.....	67.8	92.5	45.3	92.0	41.70

² See table 8 in March 1941 "Employment and Pay Rolls" pamphlet for revised figures from January 1935 to February 1941.

³ *Knitted cloth*.—June and July 1941 hourly earnings revised to 53.4 and 54.5 cents. Because of change in composition of the reporting sample, these figures not comparable with those previously published. Comparable May 1941 figures, 53.7 cents.

¹⁰ Not available.

¹¹ Indexes adjusted to 1935 Census. Comparable series back to January 1929 presented in January 1938 issue of pamphlet.

¹² See table 7 of October 1940 "Employment and Pay Rolls" for revised employment and pay-roll indexes, average hours worked per week, average hourly earnings, and average weekly earnings in anthracite mining, February 1940 to September 1940, inclusive.

¹³ See table 7 of February 1941 pamphlet for revised figures for metalliferous mining from January 1938 to January 1941, inclusive.

¹⁴ Does not include well-drilling or rig-building.

¹⁵ Average weekly earnings, hourly earnings, and hours not comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

¹⁶ Retail-trade indexes adjusted to 1935 Census and public-utility indexes to 1937 Census. Not comparable to indexes published in pamphlet prior to January 1940 or in Monthly Labor Review prior to April 1940, with but one exception, retail furniture, which has been revised since publication of July 1940 pamphlet back to January 1936.

Comparable series for earlier months available upon request.

¹⁷ Covers street-railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies; formerly "electric-railroad and motorbus operation and maintenance."

¹⁸ Indexes adjusted to 1933 Census. Comparable series in November 1934 and subsequent issues of "Employment and Pay Rolls."

¹⁹ Cash payments only; additional value of board, room, and tips not included.

²⁰ Indexes of employment and pay rolls are not available; percentage changes from preceding month substituted.

²¹ See note 18 in table 10 in the July 1941 issue of "Employment and Pay Rolls" for revised average weekly earnings in the brokerage industry from January 1939 to January 1941.

²² Based on estimates prepared by the United States Maritime Commission covering employment on steam and motor merchant vessels of 1,000 gross tons or over in deep-sea trades only.

²³ Preliminary; source—Interstate Commerce Commission.

TABLE 3.—Indexes of Employment and Pay Rolls in 55 Additional Manufacturing Industries

[12-month average 1939=100]

Industry	Employment			Pay rolls		
	Oct. 1941	Sept 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941
Iron and steel group:						
Metal doors and shutters.....	148.3	148.0	145.7	219.0	196.9	196.4
Firearms.....	(1)	(1)	(1)	(1)	(1)	(1)
Screw-machine products.....	207.9	203.2	200.1	293.8	281.8	274.1
Wire drawing.....	140.3	140.6	138.2	173.1	172.0	170.6
Wrought pipe not made in rolling mills.....	159.6	158.0	150.8	204.4	194.4	198.7
Steel barrels, kegs, and drums ²	147.2	140.4	138.1	190.7	186.6	177.9
Machinery group:						
Machine-tool accessories.....	246.9	241.0	237.3	330.7	323.2	312.2
Pumps.....	203.3	197.7	194.7	312.8	301.8	285.4
Refrigerators and refrigerating apparatus.....	121.4	127.6	136.3	141.5	147.4	162.1
Sewing machines ³	136.8	134.7	129.7	220.3	212.7	198.2
Washing machines, wringers, and driers.....	113.6	126.5	125.0	133.1	142.4	152.4
Transportation equipment group:						
Motorcycles, bicycles, and parts.....	169.4	166.9	168.4	216.6	205.4	206.4
Nonferrous metals group:						
Sheet-metal work.....	149.5	149.3	148.7	189.1	189.8	190.0
Smelting and refining of scrap metal.....	156.5	155.1	147.1	194.4	186.3	188.4
Lumber group:						
Caskets and morticians' goods ⁴	105.3	104.8	104.5	120.1	117.1	116.0
Wood preserving.....	123.1	124.7	125.4	160.9	158.2	161.0
Wood turned and shaped.....	108.5	113.1	113.7	142.1	138.6	134.4
Wooden boxes, other than cigar.....	127.9	125.3	123.4	170.9	162.0	164.1
Mattresses and bed springs.....	128.8	130.7	129.7	161.7	165.4	159.7
Stone, clay, and glass products group:						
Abrasive wheels.....	193.7	190.8	186.8	257.8	247.5	234.6
Asbestos products.....	144.2	145.9	146.2	195.2	195.7	191.4
Lime.....	121.0	123.2	125.5	161.8	160.8	161.1
Gypsum.....	128.1	128.3	110.3	169.6	171.4	149.0
Glass products made from purchased glass.....	136.7	146.9	148.1	167.9	169.5	167.3
Wallboard and plaster, except gypsum.....	140.8	140.3	142.7	166.3	167.4	181.1
Textiles:						
Textile bags.....	117.7	115.7	113.0	137.3	136.5	131.9
Cordage and twine.....	142.5	138.7	136.9	193.6	186.3	182.4
Curtains, draperies, and bedspreads.....	112.4	114.9	111.0	158.0	172.2	164.2
Housefurnishings, other.....	142.2	145.8	135.5	176.6	178.9	166.4
Jute goods, except felt ⁵	128.9	116.5	134.2	174.5	155.8	177.9
Handkerchiefs.....	108.6	108.8	106.4	144.5	137.7	130.1
Leather group:						
Boot and shoe cut stock and findings ⁶	104.9	106.7	107.7	125.8	128.4	126.4
Leather gloves and mittens.....	154.1	148.4	149.9	195.8	191.3	194.0
Trunks and suitcases ⁷	180.5	171.4	163.1	204.1	187.3	166.9
Food group:						
Cereal preparations.....	116.6	118.4	120.1	128.0	139.5	143.9
Condensed and evaporated milk.....	124.4	124.4	123.7	146.3	144.2	142.6
Feeds, prepared.....	113.7	112.7	111.6	136.5	135.8	126.6
Paper and printing group:						
Paper bags.....	129.3	131.7	130.2	160.7	161.4	153.2
Envelopes.....	123.1	121.7	120.5	136.6	136.9	132.7
Paper goods, not elsewhere classified.....	128.7	130.0	126.8	152.3	151.0	144.6
Bookbinding.....	117.0	116.9	116.0	143.2	148.6	148.3
Lithographing.....	108.3	108.7	106.5	117.9	123.3	121.5
Chemical, petroleum, and coal products group:						
Ammunition.....	(1)	(1)	(1)	(1)	(1)	(1)
Compressed and liquefied gases.....	140.5	139.0	140.4	162.3	154.8	167.0
Perfumes and cosmetics.....	121.8	114.9	107.3	140.5	125.2	116.9
Coke oven products.....	124.3	124.9	126.2	147.4	146.1	147.5
Paving materials.....	113.6	126.6	127.0	139.2	158.0	158.8
Roofing materials.....	129.6	133.0	135.4	164.9	161.0	169.2

¹ Not available.² Revisions of employment and pay-roll indexes in the following industries have been made as indicated. Steel barrels, kegs, and drums—March, April, May, June, and July employment to 103.5, 112.4, 124.1, 130.3, and 135.6; pay roll to 120.5, 139.0, 159.6, 173.6, and 167.5.³ Sewing machines—January, February, March, April, May, June, and July employment to 111.7, 113.3, 117.5, 121.9, 125.0, 127.9, and 129.3; pay roll to 127.8, 138.9, 149.5, 165.9, 178.6, 194.7, and 190.7.⁴ Caskets and morticians' goods—March, April, May, June, and July employment to 103.0, 102.6, 101.6, 101.0, and 102.9; February, June, and July pay roll to 110.7, 109.5, and 112.3.⁵ Jute goods, except felt—January, February, March, April, May, June, and July employment to 106.7, 108.3, 115.1, 123.0, 122.2, 128.3, and 130.6; pay roll to 115.3, 122.3, 137.6, 152.7, 153.9, 162.1, and 165.1.⁶ Boot and shoe cut stock and findings—February, March, May, June, and July employment to 103.7, 105.2, 103.4, 105.6, and 107.9; February, March, April, May, June, and July pay roll to 114.4, 118.5, 111.7, 114.5, 124.8, and 128.5.⁷ Trunks and suitcases—November and December 1940, January, February, March, April, May, June, and July 1941 employment to 125.8, 127.4, 124.3, 130.9, 126.0, 130.8, 136.4, 145.6, and 152.2; pay roll to 132.9, 146.2, 126.8, 132.7, 129.1, 133.3, 140.0, 151.6, and 149.7.

TABLE 3.—Indexes of Employment and Pay Rolls in 55 Additional Manufacturing Industries—Continued

Industry	Employment			Pay rolls		
	Oct. 1941	Sept. 1941	Aug. 1941	Oct. 1941	Sept. 1941	Aug. 1941
Miscellaneous group:						
Chemical fire extinguishers.....	319.4	326.2	301.4	471.3	483.3	430.1
Buttons.....	121.0	120.2	116.2	156.9	151.5	148.2
Instruments—professional, scientific, and commercial.....	218.1	200.3	200.0	280.2	249.5	242.1
Optical goods.....	177.1	174.3	173.2	215.2	208.5	203.7
Photographic apparatus.....	124.9	126.2	126.9	162.3	159.9	156.4
Pianos, organs, and parts.....	130.7	129.5	126.1	159.6	151.4	144.6
Toys, games, and playground equipment.....	139.7	144.3	144.6	157.8	155.4	157.4

TABLE 4.—Indexes of Employment and Pay Rolls in Selected Manufacturing¹ and Nonmanufacturing² Industries, October 1940 to October 1941

Industry	1940				1941									
	Av.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Manufacturing	Employment													
All industries.....	107.5	113.8	114.7	116.2	115.5	117.8	119.9	122.6	124.9	127.9	130.6	133.1	135.2	135.3
Durable goods ³	104.3	112.8	115.5	117.7	118.3	121.0	123.7	127.7	131.3	135.1	137.6	138.7	142.1	144.0
Nondurable goods ⁴	110.6	114.8	113.8	114.8	112.7	114.7	116.3	117.8	118.8	121.1	123.9	127.7	128.7	127.1
Nonmanufacturing														
Anthracite mining ⁵	50.7	49.4	50.4	50.8	50.3	50.6	50.2	48.7	48.6	49.2	49.3	50.0	50.0	50.3
Bituminous-coal mining ⁵	88.0	89.2	89.8	90.1	90.2	90.6	91.1	23.5	87.9	88.1	90.3	92.6	94.2	95.0
Metalliferous mining ⁶	69.9	72.6	72.5	72.2	72.5	73.4	74.3	77.2	77.1	78.9	79.0	79.9	79.4	79.4
Quarrying and nonmetallic mining.....	45.3	48.8	47.2	45.4	41.7	42.4	44.2	48.2	51.0	51.9	52.7	53.9	54.2	53.8
Crude-petroleum production.....	62.9	62.4	61.3	60.7	60.3	60.4	60.2	60.1	60.3	61.5	62.1	62.2	61.8	61.3
Telephone and telegraph ⁷	77.9	79.1	79.2	79.7	80.4	80.9	81.8	83.2	84.6	86.3	88.3	89.6	90.3	90.6
Electric light and power ⁷	91.1	92.3	91.8	91.3	90.5	90.1	90.3	91.3	92.2	93.5	94.6	95.2	94.9	93.9
Street railways and busses ⁷	68.5	68.7	68.7	68.4	68.3	68.0	68.2	68.3	68.9	69.1	69.5	69.7	70.3	70.1
Wholesale trade.....	90.4	91.0	91.8	92.5	91.2	91.4	91.8	92.4	92.2	93.8	94.2	95.8	95.6	96.6
Retail trade ⁷	92.3	94.3	96.3	108.1	90.5	90.7	92.5	97.8	96.1	97.8	96.7	96.9	100.0	100.9
Year-round hotels ⁸	92.0	93.4	92.3	92.6	92.9	93.9	94.2	95.2	96.3	95.0	94.5	94.5	95.7	95.6
Laundries ⁹	99.5	100.2	99.7	100.3	101.4	101.1	102.5	104.9	108.3	112.0	115.8	114.6	113.0	110.9
Dyeing and cleaning ⁹	104.7	109.4	106.0	103.3	101.0	101.4	104.4	117.2	120.6	122.7	121.7	118.9	121.5	121.0

¹ 13-year average 1923-25=100—adjusted to preliminary 1939 Census of Manufactures. See tables 9, 10, and 11 of December 1940 Employment and Pay Rolls for comparable figures back to January 1919 for "all manufacturing" and January 1923 for "durable goods" and "nondurable goods."

² 12-month average for 1929=100. Comparable indexes for wholesale trade, quarrying, metal mining, and crude-petroleum production are in November 1934 and subsequent issues of Employment and Pay Rolls or in February 1935 and subsequent issues of Monthly Labor Review. For other nonmanufacturing indexes see notes 5, 6, and 7.

³ Includes: Iron and steel, machinery, transportation equipment, nonferrous metals, lumber and allied products, and stone, clay, and glass products.

⁴ Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.

⁵ Indexes have been adjusted to the 1935 Census. Comparable series from January 1929 forward are presented in January 1938 and subsequent issues of Employment and Pay Rolls. See also table 7 of October 1940 pamphlet for revised figures for anthracite mining February 1940 to September 1940.

⁶ See table 7 of February 1941 pamphlet for revised indexes January 1938 to January 1941.

⁷ Retail-trade indexes adjusted to 1935 Census and public-utility indexes to 1937 Census. Not comparable with indexes published in Employment and Pay Rolls pamphlets prior to January 1940 or in Monthly Labor Review prior to April 1940. Comparable series January 1929 to December 1939 available in mimeographed form.

⁸ Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

⁹ Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

TABLE 4.—Indexes of Employment and Pay Rolls in Selected Manufacturing¹ and Nonmanufacturing² Industries, October 1940 to October 1941—Continued

Industry	1940				1941											
	Av.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.		
Pay rolls																
Manufacturing																
All industries.....	105.4	116.2	116.4	122.4	120.7	126.8	131.2	134.7	144.1	152.2	152.7	158.1	162.6	166.6		
Durable goods ³	107.8	123.4	125.1	131.7	132.0	139.3	144.6	149.9	163.1	173.9	172.2	177.6	183.2	191.1		
Nondurable goods ⁴	102.7	108.1	106.6	112.1	108.1	112.9	116.3	117.7	122.9	127.9	130.7	136.3	139.5	139.2		
Nonmanufacturing																
Anthracite mining ⁵	38.5	32.3	37.6	42.7	38.5	45.2	42.4	24.3	33.4	51.2	34.8	51.1	49.6	49.2		
Bituminous-coal mining ⁵	81.2	83.6	84.5	91.4	87.8	90.8	93.8	15.5	103.4	107.2	105.4	117.3	115.5	122.6		
Metalliferous mining ⁶	66.7	71.3	69.8	72.8	70.4	71.8	72.7	78.9	81.5	85.3	79.3	85.4	85.9	88.4		
Quarrying and nonmetallic mining.....	40.5	46.7	42.3	42.4	36.9	38.2	40.3	47.0	53.2	55.7	55.5	59.3	60.6	60.8		
Crude-petroleum production.....	58.2	57.6	56.8	55.9	55.7	57.3	56.1	57.8	58.6	59.9	61.4	61.5	64.4	63.0		
Telephone and telegraph ⁷	100.2	102.2	103.2	103.5	103.9	104.3	106.4	107.3	110.5	113.0	115.7	116.4	117.3	117.6		
Electric light and power ⁷	104.8	107.0	106.9	106.0	105.1	105.4	106.1	107.6	109.6	111.4	113.5	115.1	115.0	116.0		
Street railways and busses ^{7,8}	70.4	70.7	70.3	73.1	70.7	71.0	72.5	72.0	72.7	76.2	75.8	78.6	78.1	78.1		
Wholesale trade.....	79.0	80.2	80.7	83.4	80.5	81.4	82.0	83.4	84.6	88.4	88.0	89.8	90.9	92.0		
Retail trade ⁷	84.2	85.8	87.1	97.3	83.7	84.6	86.2	91.7	91.5	95.2	94.0	94.0	95.8	97.5		
Year-round hotels ⁸	82.4	84.2	83.6	84.1	84.1	86.1	85.7	87.1	87.9	87.4	87.6	88.2	90.0	92.0		
Laundries ⁸	87.7	88.0	87.2	89.2	89.8	89.7	90.9	95.8	98.7	102.5	106.7	104.7	105.2	103.2		
Dyeing and cleaning ⁸	78.2	82.4	77.8	75.8	73.3	74.4	77.2	97.8	96.1	98.4	96.4	92.1	99.5	98.4		

See footnotes on preceding page.

UNEMPLOYMENT IN NOVEMBER 1941

THE volume of unemployment remained unchanged in November at 3,900,000, according to the WPA monthly unemployment survey. Total employment increased slightly, but this increase was offset by a seasonal decline in the labor force.

Estimated Civilian Labor Force, Employment, and Unemployment, by Months, April 1940–November 1941

Month and year	Estimated number (millions of persons)			Month and year	Estimated number (millions of persons)		
	Labor force	Employed	Unemployed ¹		Labor force	Employed	Unemployed ¹
1940				1941			
April.....	53.9	45.1	8.8	January.....	52.8	45.2	7.6
May.....	54.7	46.3	8.4	February.....	52.7	45.5	7.2
June.....	56.3	47.7	8.6	March.....	52.4	45.6	6.8
July.....	57.0	47.7	9.3	April.....	53.3	46.7	6.6
August.....	56.7	47.8	8.9	May.....	54.0	48.3	5.7
September.....	55.2	48.1	7.1	June.....	55.7	49.8	5.9
October.....	54.8	47.4	7.4	July.....	56.0	50.4	5.6
November.....	53.9	46.3	7.6	August.....	55.8	50.5	5.3
December.....	53.2	46.1	7.1	September.....	54.3	49.8	4.5
				October.....	53.5	49.6	3.9
				November.....	53.3	49.4	3.9

¹ Includes persons on public emergency work projects.

The labor force data derived from the WPA survey show marked seasonal fluctuations, and are subject also to minor fluctuations due to sampling variation. It is significant, however, to note that in general the changes shown over the year conform fairly closely to expectations based on population growth. From November 1940 to November 1941 the WPA series shows a net decline of 600,000 in the civilian labor force. If allowance is made for the net increase of about 1,200,000 in the United States military forces during the period, an increase of roughly 600,000 in the total labor force is indicated. This is in fairly close agreement with the average annual increase of roughly 700,000 which may be expected to result from population growth.¹

¹ See Monthly Labor Review for November 1941 (p. 1172): Estimated Growth in the Labor Force, 1940 to 1950.

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Recent Publications of Labor Interest

JANUARY 1942

Child Labor and Child Welfare

The census counts the child workers of the country. By Beatrice McConnell. (In *The Child*, U. S. Children's Bureau, Washington, September 1941, pp. 79-82; also reprinted.)

Gives some preliminary figures from the 1940 census.

Child labor and the defense emergency. By Ella Arvilla Merritt. (In *The Child*, U. S. Children's Bureau, Washington, October 1941, pp. 93-96.)

Includes a tabulation showing number of placements by public employment offices in the United States of minors 16 and 17 years of age, by sex, January to July of 1940 and 1941, and percentage of increase during this period.

Child labor today bears watching! By Gertrude Folks Zimand. (In *Public Health Nursing*, New York, October 1941, pp. 568-575; illus.)

Children of dockland. By Nan Goodall. London, Society for Promoting Christian Knowledge, 1940. 80 pp., illus.

Describes situation of children in poorest parish of a large British seaport.

The schools in wartime. London, Ministry of Information, 1941. 26 pp., illus.

Deals with evacuation of children from dangerous areas in Great Britain and their education in a changed environment.

Occupational hazards to young workers: Report No. 2, Motor-vehicle drivers and helpers. Washington, U. S. Children's Bureau, 1941. 20 pp. (Publication No. 274.)

The report covers the nature and hazards of work on motor vehicles, statistics of accidents to drivers, legal minimum-age standards, and employers' and trade-union policies concerning the minimum age for employment.

Cost and Standards of Living

The effect of war on the cost of living—a selected list of references. Compiled by Ann Duncan Brown. Washington, U. S. Library of Congress, Division of Bibliography, 1941. 17 pp.; mimeographed.

Rent levels during the defense program: A study on rent regulations. By Julius Fischer. New York, the author, 23 West 95th Street, 1941. 68 pp.; mimeographed.

Rent profiteering and its control, 1917-1918. Washington, U. S. Bureau of Labor Statistics, 1941. 28 pp.; processed.

What is the cost of living? By Harold F. Browne. (In *Management Record*, National Industrial Conference Board, Inc., New York, November 1941, pp. 133-137.)

A series of questions and answers on where and how the National Industrial Conference Board gets the data used as the basis of its cost-of-living indexes and on the method of computing the indexes.

El standard de vida y la alimentación. By Moisés Poblete Troncoso. (In *Acción Social*, Santiago de Chile, October 1941, pp. 48-53.)

Comparative statement of the proportion of wages spent for food in Argentina, Brazil, Canada, Chile, Colombia, Ecuador, Mexico, and the United States; report of the Third International Nutrition Conference held in Buenos Aires in 1939; and discussion of the nutrition problems of the American nations.

EDITOR'S NOTE.—The Bureau of Labor Statistics does not distribute the publications to which reference is made in this list, except those issued by the Bureau itself. For all others, please write to the respective publishing agencies mentioned.

The politics of food. By George Darling. London, George Routledge & Sons, Ltd., 1941. 211 pp.

The food situation in Great Britain is discussed from the standpoint of Governmental policies regarding distribution and rationing. The writer believes that the intensified State control of the food industry during the war must be continued after the war in order to insure for every one a satisfactory supply of food.

Education and Guidance

Educational research studies of national scope or significance. By David Segal. Washington, U. S. Office of Education, 1941. 35 pp.

Brief résumé of some of the recent research studies which have been conducted on a large scale and the results of which are of prime importance to education. Included are city school surveys, State surveys, surveys of educational organization and administration, studies of adjustment of school children and youth, a study of the relations of secondary and higher education in Pennsylvania, and Federally sponsored research studies of national scope.

A guide to guidance. By Charles M. Smith and Mary M. Roos. New York, Prentice-Hall, Inc., 1941. 440 pp., bibliography.

The book is designed to serve as a handbook for those who desire to establish a guidance service.

Introduction to works practice: A practical guide to procedure in engineering production, how to read blueprints, micrometers, etc., and how to make workshop calculations. London, George Newnes, Ltd., 1941. 104 pp., diagrams, illus. (Complete engineer series, Vol. 1.)

For the worker who is ambitious to obtain more than a routine job.

Training courses for household employees. By Leila Doman. (In Journal of Home Economics, Washington, December 1941, pp. 711-715.)

The report gives data on teaching personnel, courses of study, and the students enrolled in 42 schools in different sections of the country.

Dominion-provincial youth training program; Dominion-provincial war emergency training program; national forestry program; report of Dominion supervisor of training for fiscal year ending March 31, 1941. Ottawa, Department of Labor of Canada, 1941. 32 pp.

Employment and Unemployment

Employment outlook in full-fashioned hosiery industry. By Ruth E. Clem. Washington, U. S. Bureau of Labor Statistics, 1941. 28 pp. (Serial No. R. 1377, reprint from October 1941 Monthly Labor Review.)

Statistical survey of the learned world: Number of persons engaged in scientific and professional occupations, arranged by countries. Washington, National Roster of Scientific and Specialized Personnel, 1941. 9 pp.; mimeographed.

Wholesale trade—employment by months and employment and pay roll for one week. Washington, U. S. Bureau of the Census, 1941. 150 pp., charts. (Sixteenth Census of the United States, 1940; Census of Business, 1939.)

Effects of national defense program on unemployment and need. By Howard B. Myers. Chicago, American Public Welfare Association, 1941. 12 pp.

Contrary to the general belief that unemployment will become negligible under the expansion of industry for the defense program, the author believes that this increase in employment cannot affect, to any marked degree, the increase in the labor supply and the unemployment created by the curtailment of other industries.

Health and Industrial Hygiene

Fatigue of workers, its relation to industrial production. By Committee on Work in Industry, National Research Council. New York, Reinhold Publishing Corp., 1941. 165 pp.

The survey consisted of taking the testimony of persons who were expert in the fields covered by the investigation. Subjects covered included the effects of heat and high altitude, some industrial causes of illness, the Western Electric researches into the effect of certain working conditions in producing fatigue, self-expression and labor unions, and the effect of extra-time allowances.

Health status of adults in the productive ages. By David E. Hailman. (In Public Health Reports, U. S. Public Health Service, Washington, October 24, 1941, pp. 2071-2087.)

The study is based on the results of examinations of drafted men in the last war and of the National Health Survey, from which estimates are made of the number of men and women in the country who are suffering from serious handicapping chronic diseases or serious physical or mental impairments.

It is estimated that in 1940 there were at least 16,200,000 men and women in the productive ages, 20-64, who were suffering from such disabilities and that at least 800,000 (excluding those in institutions) were more or less permanently incapacitated.

Medical care in industry. By Franz Goldmann, M. D. (In Medical Care, Vol. 1, No. 4, Baltimore, autumn 1941, pp. 301-312.)

Four industrial medical services were studied. Three of the plans were inclusive and one was restricted as to kind of illness and type of service. The average number of persons eligible for service ranged from 5,300 to 100,000, and total average costs per eligible person per year for the inclusive service ranged from about \$10.75 to \$23.40, while in the plan providing restricted service the cost averaged \$11.30.

The data in this article and one to follow supplement the writer's report on "Prepayment plans for medical care," published by Joint Committee of Twentieth Century and Good Will Funds.

Practical public health problems. By Sir William Savage, M. D. London, J. & A. Churchill, Ltd., 1941. 198 pp.

Discusses various aspects of environmental hygiene, such as the supervision of water supplies, tuberculosis and the milk supply, supervision and control of milk pasteurization, inspection and health aspects of canned foods, and problems of housing inspection.

Sickness and medical care among the rural population in a petroleum-producing area of Arkansas. By Isabella C. Wilson. Fayetteville, Ark., University of Arkansas, Agricultural Experiment Station, 1941. 49 pp. (Bull. No. 413.)

Shows the extent of sickness among 262 white families and 46 Negro families and the amount of medical care they received.

Services, facilities, and costs of medical care and hospitalization for township relief cases [Indiana]. Indianapolis, Unemployment Relief Commission, 1941. 29 pp.; mimeographed.

Dermatitis from cutting oils. By Louis Schwartz, M. D. (In Public Health Reports, U. S. Public Health Service, Washington, October 3, 1941, pp. 1947-1953.)

Describes the action of cutting oils on the skin, the types of dermatitis produced, and preventive measures.

A study of the effect of lead arsenate exposure on orchardists and consumers of sprayed fruit. By Paul A. Neal, M. D., and others. Washington, U. S. Public Health Service, 1941. 181 pp., bibliography, diagrams, illus. (Public health bull. No. 267.)

The investigation extended over a period of 3 years and covered 1,231 persons, of whom 542 were orchardists. Only 6 men and 1 woman, all orchardists, were found to have a combination of clinical and laboratory findings directly referable to the absorption of lead arsenate; and although some physicians might interpret these cases as minimal lead arsenate intoxication, the report states, they did not come up to the standard set by the Committee on Lead Poisoning of the American Public Health Association for lead intoxication, incipient plumbism, or lead poisoning. The study was carried out in an apple-producing region in the State of Washington in which lead arsenate had been used in spraying since 1900.

Housing

Housing for health. Papers presented under auspices of Committee on the Hygiene of Housing of American Public Health Association. Lancaster, Pa., Science Press Printing Co., 1941. 221 pp., diagrams.

Housing in Philadelphia, 1939-1940. Philadelphia, Philadelphia Housing Association, 1941. 27 pp., maps, illus.

Contains discussion of the effects of population and family-size losses on housing trends, and an account of private and public housing activities.

British monetary policy and the housing boom. By Wolfgang F. Stolper. (In Quarterly Journal of Economics, Cambridge, Mass., November 1941, Part II; 170 pp.)

Deals with the housing problem, cost of building, rents, demand for houses, and the influence of monetary policy.

Um estudo comparativo da habitação em S. Paulo. By Donald Pierson. (In Economica, São Paulo, Brazil, October 1941, pp. 7-13; illus.)

Results of a study of housing conditions in São Paulo, Brazil, based on an investigation by social-science students of conveniences, rentals, tenancy, etc., of 200 houses, selected from six representative sections of the city. This study was so conducted as to serve as a basis for comparison with similar studies for other cities.

Industrial Accidents and Accident Prevention

Employment and accidents at copper mines, mills, and smelters in the United States in 1940. Washington, U. S. Bureau of Mines, [1941]. 8 pp.; mimeographed. (Health and safety statistics No. 291.)

One of a series of preliminary mimeographed reports giving summary data on accidents in mines and related industries in 1940. Other reports already available in this form cover, respectively, gold, silver, and miscellaneous metal mines, lead and zinc mines, iron-ore mines, and quarries and related plants (Health and safety statistics Nos. 292, 294, 295, 296).

Causes and prevention of accidents in logging and lumber mills, 1940. By Max D. Kossoris and Frank S. McElroy. Washington, U. S. Bureau of Labor Statistics, 1941. 25 pp. (Serial No. R. 1386, reprint from December 1941 Monthly Labor Review.)

Dust-explosion hazards from certain powdered metals. By Hylton R. Brown. Washington, U. S. Bureau of Mines, 1941. 7 pp.; mimeographed. (Information circular 7183.)

Safety clothing for women in industry. By Margaret T. Mettert. Washington, U. S. Women's Bureau, 1941. 11 pp., illus. (Special bull. No. 3.)

Memoria de la Sección Accidentes del Trabajo de la Caja Nacional de Ahorros [Chile], correspondiente al 1^{er} semestre del año 1940. Santiago, [1940?]. 26 pp., paster.

This report of the industrial-accidents section of the Chilean National Savings Fund contains summary statistics for the first half of 1940, and detailed data for the period August to December 1939, showing cause and nature of injuries, industries in which they occurred, severity, treatment, and preventive measures adopted.

Industrial Relations

Labor policies of the Roosevelt administration. By Charles E. Noyes. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1941. 17 pp. (Vol. 2, 1941, No. 19.)

Proceedings of sixth industrial relations conference of Industrial Relations Section, Queen's University, September 18-20, 1941. Kingston, Ontario, Queen's University, Industrial Relations Section, 1941. 53 pp.

Wartime developments in government-employer-worker collaboration. Montreal, International Labor Office, 1941. xii, 152 pp.

Prepared for submission to the International Labor Conference at New York in October 1941, this report supplements the one entitled "Methods of collaboration between the public authorities, workers' organizations, and employers' organizations," which had been prepared as a basis of discussion at the 1940 Conference, not held owing to war conditions. The present report consists of individual monographs for Great Britain, Australia, Canada, India, New Zealand, Union of South Africa, and the United States of America, the countries of continental Europe being treated briefly in a single section. The final chapter reviews the fields in which wartime collaboration has developed and some of the outstanding features of this collaboration.

Wartime problems of industrial relations. By Thomas Roy Jones and others. New York, American Management Association, 1941. 28 pp. (Personnel series No. 51.)

The three papers in this pamphlet deal, respectively, with conditions in the United States, Canada, and Great Britain.

The public and strikes. New York, Council for Democracy, 1941. 38 pp. (Democracy in action, No. 6.)

Living with collective bargaining. By Benjamin M. Selekman. (In Harvard Business Review, Vol. 20, No. 1, New York, autumn 1941, pp. 21-33.)

Discusses the reason why harmony and peace between employers and workers is not immediately achieved with the signing of a union contract.

Wage adjustment and grievance policies. By C. Canby Balderston and others. New York, American Management Association, 1941. 24 pp. (Personnel series No. 52.)

De la constitución de los tribunales del trabajo en función de la naturaleza de los conflictos obreros. By Antonio Ferreyra Cesarino, Junior; translated from Portuguese to Spanish by Benjamín de Garay. (In *Tribunales del Trabajo, Derecho Procesal del Trabajo*, obra editada por el Instituto de Derecho del Trabajo, Facultad de Ciencias Jurídicas y Sociales, Universidad Nacional del Litoral, Santa Fe, Argentina, pp. 281-326; also reprinted.)

Following a brief discussion of the theoretical background of labor courts and citations from the general literature on the subject, the work of agencies in Brazil having functions in settlement of labor disputes is explained in detail.

Industry Reports

Preliminary survey of bituminous-coal-mine occupations on a typical workday in 1940. Washington, U. S. Bureau of Mines, [1941?]. 6 pp.; mimeographed. (Health and safety statistics, No. 290.)

Shows the percentage distribution of coal-mine workers by occupation and State.

Fifty-ninth coal report of Illinois, 1940. Springfield, Department of Mines and Minerals, 1941. 271 pp.

Statistics of production, number of men employed, fatal and nonfatal accidents, and mechanized mining and loading, in 1940 and earlier years, are included. There is also a directory of shipping coal mines.

Statistical cost functions of a hosiery mill. By Joel Dean. Chicago, University of Chicago Press, 1941. 116 pp., charts. (Studies in business administration, Vol. XI, No. 4.)

A study of hosiery-mill costs, including labor costs.

The Bell Telephone System. By Arthur W. Page. New York and London, Harper & Bros., 1941. 248 pp., map, charts.

Primarily an effort to afford an insight into the philosophy, practices, problems, and achievements of the Bell Telephone System, and not intended to be an exhaustive study. There is some discussion of employment opportunities, wages, and labor turn-over.

Recent trends in important manufacturing industries in New York [State]. Albany, Executive Department, Division of State Planning, 1941. 341 pp.; mimeographed.

Analyzes separate industries and compares trends in New York in relation to other States.

The Mexican railways under workers' administration. By Arthur W. Macmahon. (In *Public Administration Review*, Vol. 1, No. 5, Chicago, autumn 1941, pp. 458-471.)

Gives a brief history of the Mexican railways and discusses development of unions among railway workers, conditions attending the workers' administration of the Mexican railways from 1938 to 1940, causes bringing about abandonment of worker administration, and an evaluation of the experiment.

Annual report of Waterfront Control Commission, New Zealand, and statement of accounts for period ending March 31, 1941. Wellington, 1941. 14 pp.

Covers the activities of the newly established body appointed to secure quicker loading and unloading of ships.

International Labor Conditions

The International Labor Code, 1939. A systematic arrangement of conventions and recommendations adopted by International Labor Conference, 1919-1939, with appendices embodying other standards of social policy framed by International Labor Organization, 1919-1939. Montreal, International Labor Office, 1941. lvi, 920 pp.

Labor standards and inter-American solidarity. By David H. Belloch. (In *Inter-American Quarterly*, Washington, October 1941, pp. 53-67.)

Discussion of the relation of varying labor standards to hemispheric solidarity and of the progress made in establishing labor standards in Latin American countries and the influence thereon of the International Labor Organization.

Labor and Social Legislation

The law behind union agreements. By David Ziskind. Washington, U. S. Department of Labor, Office of the Solicitor, 1941. 87 pp.; mimeographed.

The Federal wage and hour law (the Fair Labor Standards Act of 1938)—questions and answers. By Arthur W. Nevins. New York, National Foremen's Institute, Inc., 1941. 58 pp.

Manual for executives, department heads, and supervisors.

Social problems and legislation in Brazil. By R. Paula Lopes. (In *International Labor Review*, International Labor Office, Montreal, November 1941, pp. 493-537.)

A brief statement of the origin and development of social and labor legislation in Brazil is followed by an analysis of the social problem of today respecting population and its distribution and the wage level, and a summary of social and labor legislation which includes that relating to workers' organizations, collective agreements, labor courts, protection of women and minors, wage and hour legislation, social insurance (including dismissal compensation, workmen's compensation, and pension and sickness insurance), regulation of factors affecting employment, labor inspection, solution of nutrition problems, and cooperative societies.

A condição do trabalhador—mulheres-menores-estrangeiros [Brazil]. By José Luiz de Almeida Nogueira Porto. (In *Legislação do Trabalho*, São Paulo, September 1941, pp. 387-394.)

Deals with Brazilian legislation for protection of working women and minors and for restriction of employment of aliens.

Welfare legislation in Canada and the Provinces, 1940. Ottawa, Canadian Welfare Council, 1941. 60 pp.; mimeographed.

Labor legislation is included.

Die schweizerische sozialgesetzgebung, 1940. Bern, Volkswirtschaftsdepartement, 1941. 225 pp.

Labor and social legislation enacted in Switzerland in 1940, including provisions concerning labor contracts, industrial conflicts, employment service, public works, insurance against unemployment, accidents, sickness, old-age, etc.; and status of salaried employees.

Labor Organization and Activities

Report of President Philip Murray to fourth constitutional convention of Congress of Industrial Organizations, Detroit, Mich., November 17, 1941. [Washington], Congress of Industrial Organizations, 1941. 88 pp.

A brief account of proceedings at this convention was published in the December 1941 *Monthly Labor Review* (p. 1452).

Stars and strikes: Unionization of Hollywood. By Murray Ross. New York, Columbia University Press, 1941. 233 pp.

This book is a study of the unionization of the various groups of workers in the Hollywood studios. It is the first comprehensive story of unionization of the film studios and is based on both documentary sources and personal interviews with individuals concerned.

British trade unionism—an outline history. By Allen Hutt. London, Lawrence & Wishart, Ltd., 1941. 160 pp.

Traces development from 1800 to 1941.

Proceedings and reports of General Federation of Trade Unions [Great Britain] from July 1940 to June 1941. London, 1941. Various paging.

The war policy of the British Labor Party. By David L. Glickman. (In *Social Research*, New York, November 1941, pp. 419-437.)

The legal personality of Philippine labor unions. By Cristeto O. Cimagala. (In *Philippine Law Journal*, Manila, October 1941, pp. 138-153.)

Negro in Industry

An economic detour: A history of insurance in the lives of American Negroes. By M. S. Stuart. New York, Wendell Malliet & Co., 1940. xxv, 351 pp., bibliography, illus.

Chapters are devoted, respectively, to important phases and developments of Negro life-insurance companies, related organizations, and fraternal benefit societies, but the major portion of the book consists of biographical sketches of insurance company officials, with some information on the organization and business of the companies with which they were or are connected.

The operation of life-insurance companies is said to be the largest business conducted by Negroes in the United States.

Equitable economic opportunities for Negroes. New York, Woman's Press, 1941. 13 pp.; mimeographed. (Public affairs news service bull. No. 8, series No. 5.)

Includes discussion of consumer incomes, relief, Negro woman workers, Southern rural farmers, training and unionism, racial differences in rates of pay, and other subjects.

The Negro Federal Government worker: A study of his classification status in the District of Columbia, 1883-1938. By Laurence J. W. Hayes. Washington, Howard University, Graduate School, 1941. 156 pp. (Studies in the social sciences, Vol. III, No. 1.)

Survey of Negroes in Little Rock and North Little Rock. Compiled by Writers' Program of Work Projects Administration in State of Arkansas. Greater Little Rock, Urban League, 1941. 101 pp., bibliography.

Deals with the economic limitations and opportunities of Negroes, their housing, and their health, in the locality investigated. Other subjects taken up include juvenile delinquency, social service, and race relations.

Placement of Negroes in New York State. (In *Employment Review*, New York State Department of Labor, Bureau of Research and Statistics, Albany, August 1941, pp. 391-396.)

The data show registrations as well as placements of Negro workers, as compared with total workers, by occupational groups.

Relief Measures and Statistics

The effect of the defense program on our relief needs. By P. D. Flanner. Chicago, American Public Welfare Association, 1941. 10 pp.

Effects of nine months of increasing employment on relief population of Marion County [Indiana]. Indianapolis, Unemployment Relief Commission, 1941. 18 pp.; mimeographed.

The second report issued by the Indiana Unemployment Relief Commission on relief problems in the county in which Indianapolis is located. It was found that relatively few relief clients were finding work in spite of the general increase in employment, and most of those finding employment were being hired for the lower jobs in the economic scale.

The history of public assistance in Chicago, 1833 to 1893. By James Brown. Chicago, University of Chicago Press, 1941. 183 pp. (Social service monograph [No. 56].)

The history of public welfare in New York State, 1867-1940. By David M. Schneider and Albert Deutsch. Chicago, University of Chicago Press, 1941. xix, 410 pp. (Social service monograph [No. 55].)

This work is divided into periods, giving a brief résumé of poor relief from 1609 to 1866 and covering the effect on the pattern of public welfare of the period of reconstruction and industrial expansion, 1867-94; the expanding scope of State supervision, 1895-1916; the World War and its aftermath, 1917-21; State consolidation and control of administrative machinery, 1922-29; and the effect of the depression, 1930-40, on relief and public welfare policies and legislation.

Wages and Hours of Labor

Hours and earnings in cigar industry, 1940. By P. L. Jones and Mary Gresham. Washington, U. S. Bureau of Labor Statistics, 1941. 24 pp. (Serial No. R. 1387, reprint from December 1941 Monthly Labor Review.)

Earnings and hours in miscellaneous fabricated textile products, September 1940. By Louis M. Solomon. Washington, U. S. Bureau of Labor Statistics, 1941. 10 pp. (Serial No. R. 1362, reprint from October 1941 Monthly Labor Review.)

Automatic cost-of-living adjustment of wages. By F. Beatrice Brower. (In Management Record, National Industrial Conference Board, Inc., New York, November 1941, pp. 138-141.)

Collective wage determination: Problems and principles in bargaining, arbitration, and legislation. By Z. Clark Dickinson. New York, Ronald Press Co., 1941. xviii, 640 pp., charts.

This volume is largely a discussion of the question "How can labor's rightful demands for greater job security and freedom-through-organization be met, with a minimum of cost inflation and antisocial restriction." There is emphasis on general concepts and considerations that have permanent significance, but the treatment is concrete and is designed to throw light on specific problems of both labor leaders and employers. The larger subjects dealt with include the factors commonly invoked in collective wage adjustment; wages in relation to industrial fluctuations; wage policies and practices in private collective bargaining; and public policy in relation to wages. The author states that the main issues involved in wage determination are not new ones and that any attempt to deal with them should give due consideration to experience and history.

The National Federation of Building Trades Operatives' [Great Britain] defense of the plain-time rate system. Albury, Surrey, National Federation of Building Trades Operatives, 1941. 31 pp.

Account of the union's efforts to obtain time-rate rather than piece-rate wage payment under the essential work order for building and civil engineering.

Wartime Conditions and Policies

After defense—what? Washington, U. S. National Resources Planning Board, 1941. 18 pp., chart.

Emphasizes that the Nation should give attention at once to post-war emergency planning with a view to making the transition from defense to peace a period of full employment by raising the national income, developing improved standards of living, and endeavoring "to make upbuilding America the keynote of the post-defense program."

Industrial mobilization—a selected list of references. Compiled by Anne L. Baden. Washington, U. S. Library of Congress, Division of Bibliography, 1941. 22 pp.; mimeographed.

Ships for freedom: The story of the stabilization program in the shipbuilding industry. Washington, U. S. Office of Production Management, Labor Division, 1941. 22 pp., charts.

Problems created by expanding employment in shipbuilding led to the appointment in November 1940 of a Shipbuilding Stabilization Committee composed of representatives of labor, the industry, and the Government. Through the efforts of this committee, and voluntary cooperation of the interested parties, labor standards were adopted for each of the four major shipbuilding areas of the United States. These standards, as well as the steps leading to their adoption, are summarized and discussed in the pamphlet listed.

Financing defense—how shall we pay the bill? New York, Council for Democracy, 1941. 41 pp. (Democracy in action, No. 4.)

Avoidance of dangerous price increases requires, in the view of the authors, an increased diversion of income from consumption to defense production through public borrowing and taxation. The importance of the defense savings bonds is emphasized. The discussion of taxation emphasizes the importance of adjusting the tax burdens in such a manner as to preserve recent social, vocational, and educational gains for the low-income groups.

Prices, profits, and wage control. By Buel W. Patch. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1941. 21 pp. (Vol. 2, 1941, No. 8.)

A brief section is devoted to wage controls in belligerent countries.

Canada's wartime labor policy. By H. J. Mellon. (In Economic Record, National Industrial Conference Board, Inc., New York, November 11, 1941, pp. 471-476; charts.)

Gives data on industrial disputes, skilled labor shortage, wage regulation, employment, earnings, and cost-of-living stabilization.

The civilian technical corps [of Great Britain]. New York, British Consulate General, [1941?]. 20 pp.

A description of the experts needed for civilian work, which was circulated in an effort to obtain volunteers among male citizens of the United States.

Important military and economic events chronology, World War II, July 1939-December 1940. By J. Donald Edwards. Washington, U. S. Bureau of Labor Statistics, 1941. 18 pp.; mimeographed.

Women in Industry

The legal status of women in the United States of America, January 1, 1938. By Sara Louise Buchanan. Washington, U. S. Women's Bureau, 1941. 89 pp. (Bull. No. 157.)

Reports for individual States, giving data from this survey, were issued separately; this final presentation includes chiefly the general summary for the United States as a whole for each of the 32 points of law covered.

Women in the Federal service. By Lucille Foster McMillin, U. S. Civil Service Commissioner. Washington, U. S. Civil Service Commission, 1941. 53 pp., bibliography, chart, illus. 3d ed.

Historical account of employment of women in the service of the United States Government, with information on the present status of women in the service and on training opportunities for those who wish to enter it.

Women who work in New York. Albany, New York State Department of Labor, Division of Women in Industry and Minimum Wage, 1941. 58 pp., charts.

Sketches briefly the history of working women in New York State and the progress made for women through progressive labor legislation.

Women at work: A brief introduction to trade unionism for women. By Mary Agnes Hamilton. London, George Routledge & Sons, Ltd., 1941. 188 pp.

History of women in trade-unions in Great Britain up to the time of the present World War.

Women in war industries in Great Britain. Washington, U. S. Women's Bureau, 1941. 22 pp.; mimeographed.

A discussion of methods of recruiting women and the uses to which their services are being put. Lists are appended showing the industrial processes reported performed by women.

General Reports

University debaters' annual: Constructive and rebuttal speeches delivered in debates of American colleges and universities during college year 1940-1941. Edited by Edith M. Phelps. New York, H. W. Wilson Co., 1941. 517 pp.

"Industry can solve the employment problem" and "Strikes in defense industries" were among the subjects of debate.

The British Empire in Australia—an economic history, 1834-1939. By Brian Fitzpatrick. Melbourne, Melbourne University Press, 1941. xxxii, 529 pp.

Labor relations in the period 1860-1912 are discussed, and the position of the worker is described as it exists in the modern Australian community.

The China economic annual, 1941. Tokyo, Asia Statistics Co., 1941. 252 pp.

The yearbook has a section on labor which gives data on working conditions, wages, hours, labor disputes, labor organizations, and cost of living (Shanghai).

Memoria de labores, Septiembre de 1940—Agosto de 1941. México, D. F., Secretaría del Trabajo y Previsión Social, 1941. 301 pp., pasters.

This report of the Mexican Secretariat of Labor and Social Welfare, for the period September 1940 to August 1941, includes data on working conditions, industrial disputes, collective agreements, workers' organizations, social insurance, industrial accidents, cost of living, minimum wage, and consumers' cooperatives. A supplement contains the labor legislation enacted within the period.

Industrialization in Palestine. By Hilde Oppenheimer-Bluhm. (In Social Research, New York, November 1941, pp. 438-453.)

Includes some discussion of labor conditions.

Memoria del Ministerio del Trabajo y de Comunicaciones [Venezuela], año civil 1940. Caracas, 1941. In 2 vols.; various paging.

Report for the calendar year 1940 of the Venezuelan Ministry of Labor and Communications. The section on labor contains information on social and labor legislation enacted or proposed, work of employment offices, wages, compulsory profit-sharing, retail prices of food, housing, industrial accidents, labor organizations, court decisions, and Government intervention in cases involving labor.